National Park Service
U.S. Department of the Interior

Santa Monica Mountains National Recreation Area
California

General Management Plan
Environmental Impact Statement

Volume 1 of 2

Final

General Management Plan

&

Environmental Impact Statement

Volume 1 of 2

Santa Monica Mountains National Recreation Area

~ California ~

JULY, 2002

United States Department of the Interior – National Park Service

Final General Management Plan & Environmental Impact Statement

SANTA MONICA MOUNTAINS NATIONAL RECREATION AREA

Los Angeles and Ventura Counties, California

This *General Management Plan / Environmental Impact Statement* describes and analyzes five alternatives for managing Santa Monica Mountains National Recreation Area. The approved plan will provide a framework for managing development, visitation, and natural and cultural resources for the next 15 to 20 years. Some issues to be addressed include impacts to natural and cultural resources caused by development, growing visitation and demand for outdoor recreation, lack of public transportation to and within the national recreation area, and increasing awareness about the national recreation area among residents of the metropolitan Los Angeles area.

The **no action alternative** provides a baseline for evaluating the environmental effects of the other alternatives. Current management practices would continue unchanged. Park managers would provide for visitor use and respond to natural and cultural resource management concerns according to current policy and legal requirements as funding allowed. About 30 percent of parkland would be designated low intensity. The **preferred alternative** incorporates the exceptional elements of the following three alternatives. Significant natural and cultural resources would be protected while providing compatible recreation and educational programs to a diverse public. About 80 percent of parkland would be designated low intensity. A Trail Management Plan would be prepared to address development and management of the trail system. Small pockets of concentrated high intensity activities would be located in nonsensitive or previously developed areas. Emphasis in the **preservation alternative** would be on preserving natural and cultural systems. About 80 percent of parkland would be designated low intensity. Some park-related development would be removed in sensitive areas. More educational exhibits would provide people with information about natural and cultural resources. Visitors would have the opportunity to visit, explore, and learn about the park through a variety of virtual "visitor centers" and informational Web sites. These alternative experiences would preserve resources by increasing appreciation and understanding. The emphasis in the **education alternative** would be on developing stronger environmental and cultural education programs. The NPS would work with local school districts and other education partners to deliver an outdoor experience to every child in Los Angeles. About 80 percent of parkland would be designated low intensity. All proposed facilities would have a strong educational emphasis. Overnight educational camps would be available to groups. People would understand and value the ecosystem through interactive educational programs using cutting-edge technology. In the **recreation alternative** the emphasis would be on maximizing recreation with new park development concentrated in nonsensitive or previously disturbed areas. A broader dispersion of outdoor recreational facilities would be provided without jeopardizing the long-term preservation of natural and cultural resources. About 65 percent of the park would be designated as moderate intensity. Facilities would be improved and/or expanded to accommodate growing demand, and existing wilderness areas would be protected.

Due to the general nature of the analysis presented, the types of environmental impacts for each of the five alternatives is fairly similar. They differ in the intensity and location of visitor uses relative to sensitive resources and required level of park management. The recreation alternative has the highest number of facility developments; however, most of these facilities are located in high-use areas and away from sensitive resources.

The public review period on the *Draft Environmental Impact Statement* ended May 31, 2001. This final document includes the results of the public comment on the draft document. The no-action period on this final plan and environmental impact statement will end 30 days after the Environmental Protection Agency has accepted the document and published a notice of availability in the *Federal Register*. For further information, write to Superintendent, Santa Monica Mountains National Recreation Area, 401 Hillcrest Drive, Thousand Oaks, CA 91360, telephone 805-370-2300, or e-mail www.nps.gov/samo.

TABLE OF CONTENTS

VOLUME 1 OF 2

VOLUME 2 OF 2

FIGURES & TABLES

FIGURES

TABLES

Alternatives

The general management plan and environmental impact statement offers five alternative approaches to manage the resources of the Santa Monica Mountains National Recreation Area throughout the next 15 to 20 years.

▲ *(NPS photo)*

ALTERNATIVES, INCLUDING THE PREFERRED ALTERNATIVE

The NPS, CSP and SMMC developed management alternatives for the SMMNRA using public responses to newsletters and public meetings as well as ideas from the staffs of the three agencies. Workshops held with leaders from the municipalities and land managers within the SMMNRA boundary also generated concepts for the alternatives and the management areas. This chapter ends with a discussion on the strategies that were considered but eliminated from further study.

The five management alternatives developed for the Santa Monica Mountains National Recreation Area are detailed in this section. They include:

- No Action Alternative
- Preferred Alternative
- Preservation Alternative
- Education Alternative
- Recreation Alternative

The alternatives include a review of five separate and distinct management areas that have been mapped and prescribed to different degrees for each alternative. The mapping is based on a general scale and does not imply that actions would be taken on private lands. This GMP/EIS has no binding authority over these lands. It suggests a future condition that would be compatible with the mission statement of the SMMNRA.

The five management areas described in each alternative include:

- Low Intensity Areas
- Moderate Intensity Areas
- High Intensity Areas
- Scenic Corridor Areas
- Community Landscape Areas

The management areas outline the existing and desired resource conditions and visitor experiences that should be achieved and maintained over time in a specific area. The management areas provide a critical foundation for all subsequent decision-making in the recreation area and are the core of this document. They are depicted in Table 7, Management Areas.

Actions Common to All Alternatives

These actions would occur under each alternative and therefore would not be included in each alternative description. Highly sensitive areas would be protected. All disturbed lands would be cleared of debris and restored to their natural state.

MANAGEMENT AREAS

Low Intensity

Watersheds and coastal resources would be protected and preserved through watershed management practices and improvements. Specific goals of the Santa Monica Mountains National Recreation Area Water Resources Management Plan include acquiring baseline watershed and coastal resources data, protecting and restoring existing water resources where appropriate, maintaining information and data on water resources for use by other agencies, managing water resources for educational/recreational activities, and protecting public health by identifying and mitigating sources of pollution and other degradation in cooperation with appropriate regulatory bodies.

Estuaries and lagoons would be restored to their natural state.

There are certain properties which are designated on the maps as "Land adjacent to park boundaries to be added". These properties, Upper Las Virgenes Canyon (formerly part of the Ahmanson Ranch), and the Liberty Canyon wildlife corridor are scheduled to be included in the SMMNRA boundary in the near future. Legislation for these changes is pending, any future acquisition, to the extent they involve the NPS, would be limited to the acceptance of donations.

NPS would develop agreements with other land management agencies and Caltrans to maintain open space in critical wildlife habitat linkage areas. The level of monitoring the use of these wildlife connections would be increased.

In 2001 the park will begin a three-year project to produce a historic resources study of NPS lands.

A portion of the 1,200-mile Juan Batista de Anza National Historic Trail through the Simi Hills/NPS lands would be marked with commemorative signs.

Sensitive historic and ethnographic resources would be protected and preserved. Alien plant species would be eradicated, where appropriate, and habitat for animal and plant populations would be maintained and restored. Steelhead trout would be reintroduced into Solstice Creek. Highly sensitive areas would be protected. Recreation would be dispersed throughout the NRA.

Moderate Intensity

An environmental education facility would be established at Solstice Canyon. Minor improvements would be made to previously disturbed areas to improve parking, restroom facilities and the outdoor classroom experience.

A trail management plan would be prepared to address trail use conflicts, missing trail links, trail camps, and other appropriate trail amenities. Trails would be managed and improved in a sustainable manner that protects natural, cultural, and scenic resources and provides for growing visitation.

The Backbone Trail would be completed.

Table 7

MANAGEMENT AREAS

USE				
Five Management Areas	Resource Management, Character & Condition	Visitor Experience & Activities	Development	Management Activities
Low Intensity Areas	• Preserve natural and cultural resources of area. • Protect resources from impacts of visitors and facility development.	• Allow quiet enjoyment of natural sights and sounds. • Restrict activities to horseback riding, mountain biking and hiking on designated trails. • Provide accessibility for persons with disabilities to buildings, programs, parking, trails, and restrooms. • Use by day only. • Allow no pets.	• Protect resources, public safety. • Allow development harmonious with natural setting. • Prohibit motorized equipment in designated wilderness areas.	• Protect resources. • Restore disturbed lands, estuaries, and lagoons to their natural state. • Close/revegetate some fire roads. • Close or re-route some non-historic trails. • Monitor resource deterioration. • Allow compatible scientific research. • Manage fire to minimize landscape disturbance.
Moderate Intensity Areas	• Preserve natural and cultural resources of area. • Allow harmonious development with natural settings. • Provide only essential visitor services and facilities. • Preserve/rehabilitate historic structures.	• Expect higher visitation/ frequent encounters with people. • Limit activities to hiking, horseback riding, mountain biking on designated trails. • Provide guided walks or self-guided trails. • Allow low impact camping and picnicking. • Provide accessibility for persons with disabilities to buildings, programs, parking, trails, and restrooms. • Permit commercial filming. • Allow pets on leashes in designated areas.	• Provide essential visitor services (restrooms, water, trailhead parking). • Build boardwalks to protect resources where necessary. • Build picnic areas/ equestrian access sites. • Limit campground development. • Put utilities underground. • Restrict utility and fire roads for administrative use.	• Protect resources. • Restore disturbed lands, estuaries, and lagoons to their natural state. • Manage visitor use/ recreational activities. • Maintain trails with motorized equipment. • Provide law enforcement. • Close or re-route some trails. • Maintain utility corridors/put utilities underground. • Manage fire to minimize landscape disturbance. • Minimize impacts from search and rescue missions/fire suppression.
High Intensity Areas	• Expect frequent sights and sounds of people and development. • Protect resources from impacts of visitors with higher degree of infrastructure and facility development. • Harmonize facility development with natural and cultural settings.	• Expect higher visitation/ frequent encounters with people and vehicles. • Develop parking areas for beaches or frequently used trails. • Provide structured interpretive and education programs or self-guided activities. • Create more interpretive exhibits. • Increase visitation to historic structures and cultural landscapes. • Provide accessibility for persons with disabilities to buildings, programs, parking, trails, and restrooms. • Allow overnight camping, including group camping.	• Provide full visitor services (restrooms, water/potable water, trailhead parking, visitor orientation). • Encourage harmonious development to protect resources. • Use gravel, compacted gravel/soil or pavement for trails. • Build boardwalks as needed. • Use pavement or gravel for trailhead parking. • Develop campgrounds, interpretive overlooks, waysides, exhibits, self-guided interpretive trails, and appropriate public transportation areas (park and rides).	• Protect resources. • Restore disturbed lands, estuaries, and lagoons to their natural state. • Manage visitor use/recreational activities. • Maintain trails with motorized equipment. • Close, re-route or revegetate some non-historic trails. • Close/revegetate non-essential roads. • Maintain utility corridors/put utilities underground. • Manage fire to minimize landscape disturbance. • Minimize impacts from search and rescue missions/fire suppression.

(cont'd) **Table 7**

MANAGEMENT AREAS

	USE			
Five Management Areas	Resource Management, Character & Condition	Visitor Experience & Activities	Development	Management Activities
High Intensity Areas *(cont'd)*		• Allow picnicking, swimming, surfing, kayaking. • Permit commercial filming. • Allow pets on leashes in designated areas.		• Permit emergency response staging.
Scenic Corridors	• Support lowering speed limits throughout the SMMNRA. • Promote traffic safety consistent with the character of the SMMNRA. • Limit the expansion of roadways.	• Design interpretive program to be used in a "windshield" tour. • Provide waysides at existing and proposed scenic pullouts. • Provide shuttle system.	• Develop additional scenic pullouts. • Remove streetlights, overhead powerlines, and exotic landscape material. • Replace street lights with directed, low level lighting.	• Deemphasize the use of private vehicles by providing a wider range of transportation alternatives. • Work collaboratively with CALTRANS on decisions affecting the roadways and right-of-ways in the SMMNRA. • Educate the public about benefits of using transportation alternatives.
Community Landscapes	• No management of resources would take place in these areas, but residents are encouraged to maintain the character of these areas.	• Visitor experience throughout the recreation area would be enhanced by retaining the unique features of the architecture and landscape in these areas.	• No development by NPS, CSP or SMMC.	• NPS, CSP, and SMMC would provide local decision makers with the resource data and technical assistance to maintain the unique character.

A facility would be located at Rancho Sierra Vista to provide more educational programs concerning contemporary and traditional Native American Indian culture. Programs would also be offered to interpret ranching history in the area.

An accessible trail would be developed at Liberty Canyon.

High Intensity

A coastal education center would be developed at Leo Carrillo State Park with exhibits on marine life and the culture of the Chumash.

The campground at Leo Carrillo State Park would be rehabilitated to integrate the campground with natural riparian processes. Interpretation of the riparian setting would be provided to educate visitors on the sensitive condition of this coastal landmark.

The California State University Channel Islands campus located at the mouth of Long Canyon near the western corner of the National Recreation Area would provide facilities for the northwest environmental research and education programs. An effort would be made to work cooperatively with the University and local planning jurisdictions to plan growth and protect the historic character and natural resources of the setting. Each alternative anticipates a research and information center within this complex.

The staging area at Cheeseboro Canyon would be expanded, and facilities improved.

Temescal Canyon Earth Adventure Camp would offer expanded educational day camp programs for greater Los Angeles area.

Mission Canyon would offer a trailhead, toilets, parking and interpretive facilities.

Joint administration of National Park Service and California State Park operations would occur where feasible. All three agencies would share a common vision and a visitor/operations center that consolidates all resources, fosters cooperation, and increases efficiency.

Information management and telecommunication technology would be utilized to promote rapid, reliable and efficient internal park operations. Achieving sustainability in all park operations and development of park related facilities would result in cost savings and reduced impacts on park resources.

NPS would enter into a general agreement with CALTRANS to support the concept of encouraging use of other mass transit options instead of enlarging PCH or any of the other state routes through the SMMNRA.

Future "gateway" transportation visitor centers would be designed to ease traffic problems at parking lots and to encourage ridership of recreational shuttle buses. Information would be available about transportation alternatives, and how to make transit connections to regional transit service.

NPS would provide transportation education as part of the regular interpretative programs at the park indicating how the use of alternative transportation is good for the SMMNRA and the region.

Visual and recreational elements of Mulholland Drive and Highway would be promoted and preserved. Support would be given for limiting roadway expansion and improved management of the PCH. Transportation education would be provided. Alternative fuels would be used.

NPS would enter into a general agreement with the surrounding communities and other regional agencies to explore possible transit options to serve the SMMNRA and expanding existing service to include regular transit service on weekends. NPS would support neighboring communities to create park and ride facilities that would be used by transit operations serving the SMMNRA.

Transit operators, NPS and municipalities would pursue and provide transportation systems to meet the recreational needs of the visitor. This could be accomplished by linking the park and ride facilities in the nearby communities to trail heads and other recreational destinations within the SMMNRA, and expanding transit operations to include regular weekend service.

CALTRANS and the city of Malibu would be encouraged to develop a policy of restricting roadside parking along PCH to encourage the use of off-street parking facilities for pedestrian safety and promote transit use.

NRA management agencies in the Santa Monica Mountains would seek Caltrans' cooperation to establish safe pedestrian crossings where a state highway intersects NRA and recreational lands.

Bicycling, both on paved routes and off-road developed trails (as well as bicycle parking racks), would be encouraged as an alternative form of transportation through the SMMNRA.

SUMMARY OF MITIGATION MEASURES COMMON TO ALL ALTERNATIVES

The following is a summary of mitigation measures common to all alternatives:

Air Quality

Use best available control measures for fugitive dust during high wind conditions:

- **Earth Moving Activities**

  Cease all active earth-moving operations or apply water to soil not more than 15 minutes before moving such soil.

- **Disturbed Surface Areas**

  On the last day of active operations prior to a weekend, holiday, or any other period when active operations will not occur for not more than four consecutive days: apply water with a mixture of chemical stabilizer diluted to not less than 1/20 of the concentration required to maintain a stabilized surface for a period of six months, apply chemical stabilizers prior to wind event, or apply water to all unstabilized disturbed areas three times per day. If there is any evidence of wind-driven fugitive dust, watering frequency is increased to a minimum of four times per day,or use any combination of control actions above such that, in total, these actions apply to all disturbed surface areas.

- **Unpaved Roads**

  Apply chemical stabilizers prior to wind event, apply water twice per hour during active operation, or stop all vehicular traffic.

- **Open Storage Piles**

  Apply water twice per hour or install temporary coverings.

- **Paved Road Track-out**

  Cover all haul vehicles or comply with the vehicle freeboard requirements of Section 23114 of the California Vehicle Code for both public and private roads.

- **Buildings with Potential Asbestos Containing Materials**

  Any buildings with potential asbestos materials would be surveyed; if asbestos-containing materials were present, compliance with SCAQMD Rule 1403 would be accomplished, as appropriate, including notification to the district, and coordination with scheduling, disposal, removal, and handling procedures.

Additional mitigation measures addressing equipment exhaust would include on-road and off-road speed limits, traffic volume controls, and limiting operating and idling times. Clean diesel fuel and engines would be used as much as possible. These mitigation measures would be included in all facility and trail development-specific plans.

Soundscapes

In accordance with normal construction practice, noise-generating construction equipment would be equipped with effective noise control devices (i.e., mufflers, lagging, and/or engine closures). All equipment would be properly maintained to ensure that no additional noise would be generated. Noise from construction activities would be limited according to the appropriate sections of the City of Los Angeles Noise Ordinance Subchapters 112 and 41.4. SMMNRA would further prevent and/or minimize construction noise by managing its intensity, frequency, magnitude, and duration in any one place on any particular day.

Dark Night Skies

To prevent the loss of natural darkness the SMMNRA would not use artificial lighting in sensitive habitat areas or other areas where dark-dependent natural resource components of the park might be disrupted. The SMMNRA staff would seek the cooperation of park visitors, neighbors, and local government agencies to prevent or minimize the intrusion of artificial light into the night scene of the park and would work with communities surrounding the park to develop local dark night sky ordinances. Also the following mitigation measures would be standard practice at the SMMNRA. Unnecessary night lighting would be avoided and eliminated. Artificial lighting would be restricted to those areas where security, basic human safety, and specific cultural resource requirements must be met. Minimum impact lighting techniques would be used including shielded light fixtures to prevent light spill over and use of low-intensity lights. To comply with NPS lightscape policy, all

outdoor lighting at the park would use best management practices to reduce light trespass impacts.

Soils and Geology

Soil erosion control measures, such as sedimentation retention basins, silt fencing, or slope stabilization techniques, would be included in all facility development-specific plans and would be considered when implementing any of the planned activities.

New facilities would be sited to avoid geologic hazard zones. New facilities and the modification of existing facilities would be designed and constructed in compliance with all applicable state and federal building code standards.

All grading and construction plans would be reviewed by qualified professionals for geologic and geotechnical review prior to approval.

Geotechnical and geologic hazard investigations would be conducted by qualified geologists prior to project implementation with a focus on projects in areas of concern. Such areas include projects involving hillside terrain, proximity to active or potentially active faults, proximity to landslide areas, and areas of possible liquefaction.

New facilities would be carefully sited to avoid sensitive biological and wetland resources.

Water Resources

A construction storm water management plan would be prepared by a qualified individual for all construction activities affecting one or more acres to minimize soil disturbance. The plan would consider best management practices such as temporary on-site water treatments, which include silt fences and sedimentation ponds. The California Stormwater Best Management Practices Handbook for Construction Activities would be consulted for inclusion in the plan.

Fueling and servicing of construction equipment would not occur within 100 feet of a water body or drainage area unless adequate spill control/containment is provided.

New facilities would be carefully sited to avoid sensitive biological and wetland resources.

A qualified geologist within the administrating agencies would conduct a soils and engineering evaluation to support the location and design of all septic system repairs, upgrades and installations. All requirements in the Los Angeles Regional Water Quality Control Board's Waste Discharge Requirements for sewage disposal systems would be followed.

The administering agencies would incorporate the treatment of the runoff from developed areas into facility design plans to reduce pollutants reaching waterways wherever applicable.

Floodplains

During siting of structures and use areas for proposed facilities in the vicinity of a floodplain, a qualified engineer would conduct an engineering evaluation to identify the boundaries of the 100-year floodplain. Unless infeasible, structures and use areas would be located outside the floodplain boundaries.

Facilities and trails within the 100-year floodplain would be closed 24 hours prior to a predicted 50-year, 24-hour storm event. NPS staff would patrol use areas within the floodplain prior to and during storms to assure that these areas are not occupied. In addition, various warning systems would also be utilized. For example, Ventura County Flood Control District (VCFCD) has operated a flood warning system since February 1979. The system is called "ALERT", an acronym for Automated Local Evaluation in Real Time,

which was developed by the National Weather Service.

Signage would be provided at the floodplain boundary on trails and access roads alerting park users that they are about to enter an area prone to flooding during wet weather conditions.

Biological Resources and Wetlands

Undisturbed native vegetation would be avoided when new facilities are sited.

All grading and construction plans would be reviewed prior to approval by qualified administering agency technical staff.

Areas temporarily disturbed during construction would be recontoured and revegetated with appropriate native plant species by a qualified biologist, and appropriate fuel management and fire suppression zones would be maintained around developed structures.

Erosion control measures would be considered and implemented for surface disturbing activities, such as construction or trail maintenance.

Pre-project surveys for sensitive species would be conducted by a qualified biologist prior to project implementation in the appropriate season for listed species, as well as other species of federal or state concern. Wetland delineation would also be conducted as appropriate.

The administering agencies would consult with the USFWS, ACOE (for wetlands), NMFS (for steelhead trout) and/or CDFG as appropriate during the detailed planning phase of a project, if any listed species or its habitat might be affected during a proposed action.

Surface disturbing activities in or in close proximity to, sensitive vegetative resources (e.g., wetlands, listed species habitat) would be monitored during construction by a qualified biologist.

Best management practices would be implemented during construction.

Construction monitoring would be provided by a qualified biologist in areas supporting sensitive wildlife resources.

The administering agencies would implement projects that would avoid wetlands, other sensitive habitats and habitat linkage areas through careful project siting.

A qualified biologist within the administering agencies would evaluate all proposed actions for their affects on habitats and on habitat connectivity to avoid further habitat fragmentation.

New developments would be excluded from existing wildlife corridors, or minimized to the greatest extent practicable, to ensure the continued exchange of genes and individuals between wildlife populations within and adjacent to the SMMNRA.

Degraded habitats would be restored, when feasible, within linkages, corridors, and other habitat conservation areas.

Paleontological Resources

When planning new facilities, modified facilities and fuel management that requires grading, a qualified professional would compare grading and construction plans with geologic maps during participating agencies geological and geotechnical review to determine the paleontologic sensitivity of affected sediments.

If excavation occurs in sediments that have high to moderate paleontologic sensitivity, then the participating agencies would hire a qualified paleontologic monitor during excavation.

If fossils were discovered during grading or construction, these activities would halt in the immediate vicinity of the find until the fossils have been removed in a scientifically controlled fashion by a qualified paleontologist.

The participating agencies would implement public education regarding the scientific and educational importance of fossils and promote awareness of enforcement of California State and NPS non-collection policies.

Cultural Resources

The administering agencies shall inventory cultural resources, historic structures, and cultural landscapes in accordance with Section 110 of the National Historic Preservation Act of 1966, as amended (16 USC 470). CSP would be guided by the *California Public Resources Code.*

Actions related to potentially historic roads and trails need to be assessed by a historical landscape architect or landscape historian as well as an archeologist.

Actions that would affect historic properties that include historic structures need to be assessed by a historical architect as well as a historical landscape architect and/or archeologist.

Visitor Experience

Guide visitors to high use areas.

Encourage visitor use during less busy times.

Limit opportunities for parking outside of designated parking areas and provide adequate parking at, or alternative transportation to, high intensity use areas. Recreation would be dispersed throughout the SMMNRA

Private recreation service providers would be encouraged to meeting growing demand for recreation services and facilities.

Land Use and Socioeconomic Environment

Land Use

The NPS should work closely with jurisdictions during subsequent general plan and land use development policy amendments to minimize land use designation inconsistencies with prescribed management areas within the SMMNRA.

In areas where high use intensity management areas overlap areas designated by local jurisdictions as open space, access should be designed to direct visitor use away from those open space areas designated by local jurisdictions for resource protection.

The principal strategy of protection for the National Park Service would be through agreement and cooperation rather than fee acquisition.

Population, Housing, Employment

No mitigation measures are required.

Public Services and Utilities

Fire awareness should be increased for park visitors through the use of signage and public information programs.

The onsite storage of combustible and flammable materials should be limited.

The NPS should coordinate with the Los Angeles and Ventura County Sheriff's Department to ensure adequate police protection services for the proposed management areas and facilities.

New facilities should provide additional on-site water supply/storage as necessary to reduce pressure on water suppliers and to increase the reliability of facility water supply.

Wastewater disposal systems should be planned and designed for each proposed facility at the time it is proposed to ensure adequate wastewater capacity.

The location of the nearest solid waste facility with sufficient capacity to accommodate the required additional waste flow should be identified by the participating agencies during facility planning stages. The availability of solid waste capacity should be confirmed for each facility before construction.

Energy consumption on parklands should be minimized.

The availability of energy supply from local providers should be confirmed by the participating agencies prior to facility implementation. If service is questionable, onsite power should be considered using alternative sources of energy, including solar power or individual generators.

EDUCATIONAL THEMES COMMON TO ALL ALTERNATIVES

The rich cultural and natural landscape, as well as the varied recreational features of the SMMNRA, offer tremendous possibilities for interpretation. The Santa Monica Mountains also provide a setting for a wide range of cultural, educational and research activities. This GMP includes general recommendations for the location and subject matter of such programs. Also addressed in the coming section on "Management Areas" is the level of the visitor's educational experience which may involve a self-guided tour with low impact signs in the "Low Intensity" areas, or an overnight environmental education camp in the "High Intensity" areas.

The following themes would provide the basis for the educational opportunities outlined in the alternatives.

Ecosystems

The following are proposed interpretive themes regarding ecosystems in the SMMNRA:

- SMMNRA preserves an example of the rare, dynamic and diverse Mediterranean-type ecosystem.
- The combination of a transverse mountain range, seasonal rainfall, proximity to the ocean, and temperate latitude create the unique Mediterranean-type climate found in only four other locations in the world comprising less than three percent of the global land mass.
- Collective habitats from the mountain to the sea bring together a vast diversity of individual organisms and processes, which interact to create a unique and irreplaceable ecosystem.
- A biotic system acted upon by geology, climate and fire, both natural and human-influenced, results in an ever-changing landscape.
- Local and global human activities have had and would continue to have a significant impact on the integrity of Mediterranean-type ecosystems.
- The combination of climate and scenery has created an attractive place for people to settle, impacting the environment through urban encroachments, introduction of exotic plant and animal species, pollution and fragmentation and loss of habitat.
- Through education, restoration, mitigation and wise use of the land, the habitats of this unique ecosystem can be preserved for the enjoyment of present and future generations.
- Long term, worldwide human alterations in Mediterranean-type ecosystems make undisturbed examples, like those found in SMMNRA, nationally and globally significant.

Culture and History

The following are proposed interpretive themes regarding culture and history in the SMMNRA:

- SMMNRA preserves a record of thousands of years of human interactions with the area.
- Human spirit and imagination have allowed people in this region to reach beyond their geographic limitations (e.g., Chumash trading networks, film

Pacific Coast Highway and the City of Santa Monica in the shadow of the Santa Monica Mountains.

industry, aerospace industry, water distribution, and transportation.).

- This region provides a global perspective on the continuing relationships between the land and human history from past to present to future.
- Geography, local and national events, technological advances, and changing attitudes and perceptions influence the evolving cultural landscape of this region.

Recreation and Education

The following are proposed interpretive themes regarding recreation and education in the SMMNRA:

- SMMNRA provides a variety of educational and recreational opportunities.
- Damage to recreational resources would threaten visitor opportunities.
- The SMMNRA provides a diverse, pleasing, natural and cultural landscape where visitors can experience personal solitude, contemplation, and inspiration.
- Education programs instill a sense of cultural and environmental responsibility.
- Learning about natural and cultural history in a park setting proves to be more relevant than in a classroom setting.
- SMMNRA is a gateway between the urban environment and the natural world.

Urban Interface

The following are proposed interpretive themes regarding urban interface in the SMMNRA region:

- SMMNRA can be described as an island of parklands buffeted by urban development and urban challenges.

- Balance of development and the need for preservation is necessary for the continued existence of both.
- Education is essential to ensure an awareness of natural and cultural resources to foster an environmental ethic.
- The existence of intact habitat within the Santa Monica Mountains faces increasing challenges from non-compatible human activities within and beyond its geographic boundaries.
- Cooperation between public and private organizations is essential in guaranteeing the future of parks that must be well managed, accessible to all and enhances the quality of life for all.
- In a world of diminishing biological diversity, the national recreation area provides an extraordinary global window to promote local and worldwide awareness of the value of wise use, responsible development and preservation of parklands.

No Action Alternative

BASELINE CONDITIONS

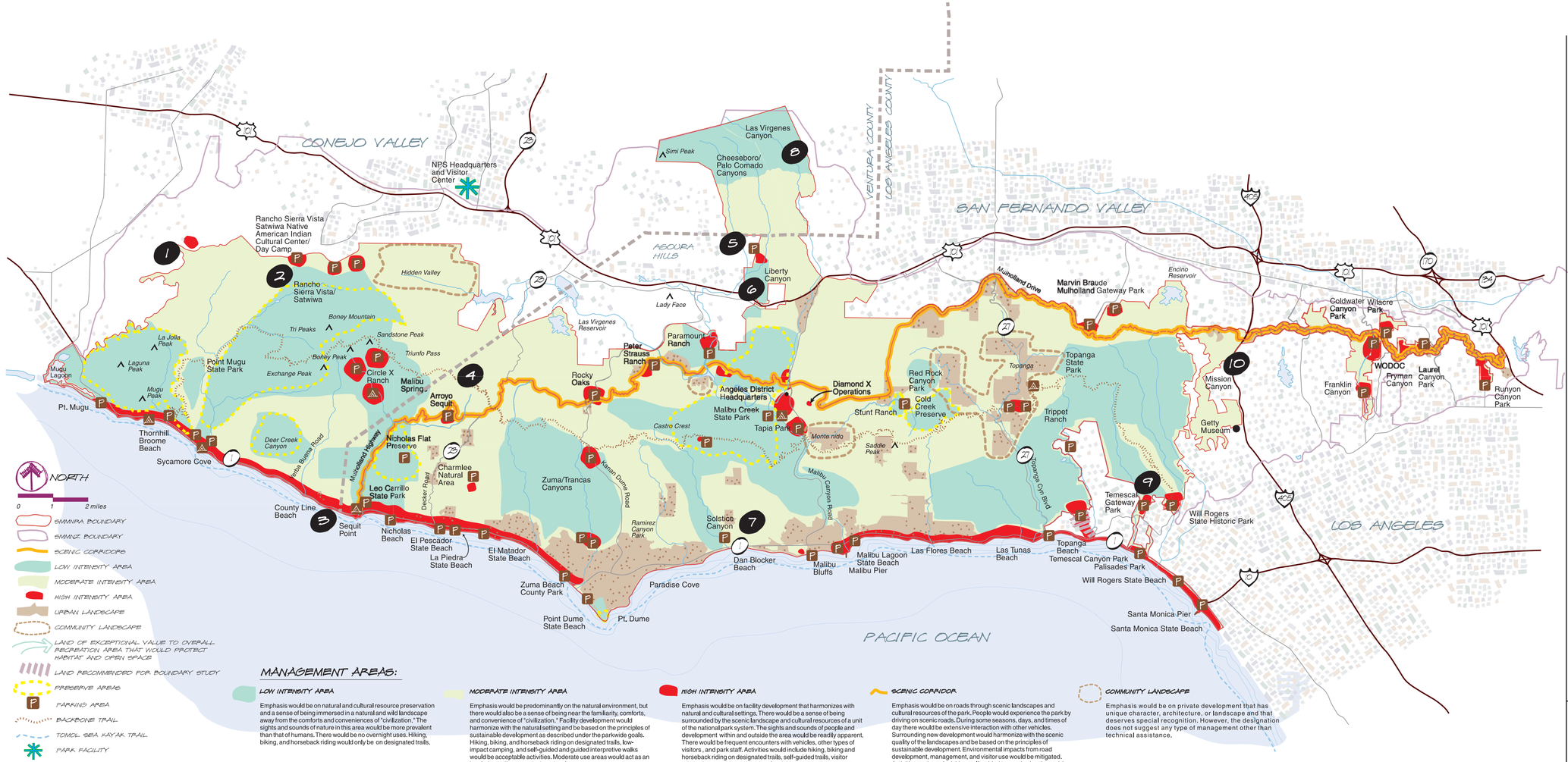
The no action alternative provides a baseline for evaluating the environmental effects of the other alternatives. Under this alternative (the status quo) current management practices would continue in Santa Monica Mountains National Recreation Area. Park managers would continue to provide for visitor use and would respond to natural and cultural resource management concerns according to current policy and legal requirements and as funding allowed. The natural resource inventory and monitoring program would be continued and expanded if possible. The park would continue to protect and maintain known archeological sites and restore or adaptively use certain historic structures on lands under public ownership. Inventories for archeological sites would continue on a site-by-site basis following compliance procedures. In 2001, the park will begin a three-year project to produce an historic resources study of NPS lands. In addition to providing historic information about the park, the study will allow the park to comply with Section 110 of the National Historic Preservation Act by leading to the location, inventory and nomination of properties that appear to be eligible to the National Register. There would be no change in management direction. The educational outreach programs to the schools would be expanded as funding allows. Table 7 illustrates the current management practices and areas within the SMMNRA.

Under the no action alternative, there would be a continuation of existing trends as outlined in the 1982 *Santa Monica Mountains National Recreation Area General Management Plan* and the state park general plans for *Point Mugu State Park, Leo Carrillo State Park, Malibu Lagoon State Beach, Malibu Creek State Park, Topanga State Park,* and *Will Rogers State Historic Park*. State and national park unit management and operations would continue as they are.

MANAGEMENT AREAS

Low Intensity

Approximately 30 percent of the parklands could be considered a low intensity area. Wilderness preserve areas and areas of irreplaceable resources, important biological and archeological areas, critical habitat and significant landform features would be protected if within public ownership.



MANAGEMENT AREAS:

LOW INTENSITY AREA

Emphasis would be on natural and cultural resource preservation and a sense of being immersed in a natural and wild landscape away from the comforts and conveniences of "civilization." The sights and sounds of nature in this area would be more prevalent than that of humans. There would be no overnight uses. Hiking, biking, and horseback riding would only be on designated trails.

MODERATE INTENSITY AREA

Emphasis would be predominantly on the natural environment, but there would also be a sense of being near the familiarity, comforts, and convenience of "civilization." Facility development would harmonize with the natural setting and be based on the principles of sustainable development as described under the parkwide goals. Hiking, biking, and horseback riding on designated trails, low-impact camping, and self-guided and guided interpretive walks would be acceptable activities. Moderate use areas would act as an insulating buffer around urban development.

HIGH INTENSITY AREA

Emphasis would be on facility development that harmonizes with natural and cultural settings. There would be a sense of being surrounded by the scenic landscape and cultural resources of a unit of the national park system. The sights and sounds of people and development within and outside the area would be readily apparent. There would be frequent encounters with vehicles, other types of visitors, and park staff. Activities would include hiking, biking and horseback riding on designated trails, self-guided trails, visitor orientation, camping, educational activities and study programs, picnicking, interpretive walks, events and festivals, day camps, and community activities.

SCENIC CORRIDOR

Emphasis would be on roads through scenic landscapes and cultural resources of the park. People would experience the park by driving on scenic roads. During some seasons, days, and times of day there would be extensive interaction with other vehicles. Surrounding new development would harmonize with the scenic quality of the landscapes and be based on the principles of sustainable development. Environmental impacts from road development, management, and visitor use would be mitigated. Activities such as picnicking; self-guided tours; viewing the park by car, motorcycle, or bus, bikes, and hiking along segregated trails or lanes would be encouraged.

COMMUNITY LANDSCAPE

Emphasis would be on private development that has unique character, architecture, or landscape and that deserves special recognition. However, the designation does not suggest any type of management other than technical assistance.

ACTIONS COMMON TO ALL ALTERNATIVES

1. RESEARCH AND INFORMATION CENTER AT CSUCI
2. DAYCAMP AT RANCHO SIERRA VISTA / SATWIWA
3. LEO CARILLO STATE PARK COASTAL EDUCATION CENTER / CAMPGROUND REHABILITATION
4. BACKBONE TRAIL TO BE COMPLETED
5. CHEESBORO CANYON TRAILHEAD EXPANDED
6. LIBERTY CANYON ACCESSIBLE TRAIL
7. SOLSTICE CANYON ENVIRONMENTAL EDUCATION DAY CAMP
8. A PORTION OF JUAN BAUTISTA DE ANZA TRAIL MARKED WITH COMMEMORATIVE SIGNS
9. TEMESCAL CANYON EDUCATIONAL DAYCAMP EXPANDED
10. MISSION CANYON TRAILHEAD FACILITIES DEVELOPED

Figure 5:

NO ACTION ALTERNATIVE

SANTA MONICA MOUNTAINS NATIONAL RECREATION AREA CALIFORNIA

INCLUDES UNITS OF NPS, CALIFORNIA STATE PARKS, AND THE SANTA MONICA MOUNTAINS CONSERVANCY

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DSC • February 2002 • 638 • 20062b

Moderate Intensity

Approximately 60 percent of the park could be considered in a medium impact zone. The Backbone Trail would be completed.

High Intensity

Approximately 10 percent of the total parklands receive extremely heavy use.

The California State Parks Headquarters would remain in its current location in Malibu Creek State Park, as would the Santa Monica Mountains Conservancy offices at the Ramirez Canyon Park.

Scenic Corridor

Under this alternative Mulholland Highway would remain the only scenic corridor.

SUMMARY OF MITIGATION MEASURES

The following is a summary of additional mitigation measures specific to the no action alternative:

Cultural Resources

All construction or revegetation projects involving ground disturbance would be preceded by a cultural resource inventory, evaluation, and impact assessment program conducted by a qualified cultural resources specialist. If necessary, mitigation measures, including avoidance or data recovery, would be developed and implemented.

A monitoring program that would assess the rate and nature of impacts to cultural resources in the vicinity of trails and other high intensity use areas would be established. This program would focus on a subset of resources, and the results extrapolated to similar settings. Should monitoring reveal the acceleration or degradation of cultural resources to an unacceptable level, mitigation measures would be developed in consultation with recreational groups, the SHPO, and concerned Native American Indian groups. Such measures would include avoidance, data recovery, access restriction, signs, visitor education, and similar actions.

The interpretive/educational outreach of SMMNRA, which includes conducting programs for school children, would be enhanced as funding allows, incorporating more information and values about cultural resources in the curriculum.

A historic resources study will begin in 2001 and be completed in 2003. It will identify significant historic sites, structures and cultural landscapes within NPS lands.

To ensure that adequate consideration and protection are accorded archeological resources, record searches and, where appropriate, archeological surveys would precede all ground disturbing activities on recreation area lands. Archeological and Native American Indian monitoring would occur by a qualified archeologist and appropriate Native American Indian representation where ground disturbance is expected in the vicinity of known or suspected cultural resources. If cultural materials were unearthed during construction activities, all work in the immediate vicinity of the discovery would be halted until the resources could be identified, their significance assessed and any necessary mitigation undertaken.

All preservation and rehabilitation efforts, as well as daily, cyclical, and seasonal maintenance, would continue to be conducted in accordance with the National Park Service's Management Policies (2001) and Cultural Resource Management Guidelines (1998), and the Secretary of the Interior's Standards for the Treatment of Historic Properties (1995), and the *California Public Resources Code.*

Historic structure reports, condition assessments, and plans for the rehabilitation

of historic structures would be developed by qualified architects well-versed in the *Secretary of the Interior's Standards for the Treatment of Historic Properties* (1995).

Actions undertaken to minimize erosion along historic roads and trails would be implemented in accordance with the *Secretary of the Interior's Standards for the Treatment of Historic Properties* (1995) and would preserve the integrity of these cultural resources.

The participating agencies shall continue to inventory cultural resources in accordance with Section 110 of the National Historic Preservation Act of 1966, as amended (16 USC 470).

A qualified archeologist would conduct a cultural resources inventory, evaluation, and assessment program preceding all trail construction. If resources were identified, mitigation measures such as avoidance or archaeological data recovery would be implemented.

Native American Indian groups would be consulted to determine appropriate mitigation measures regarding potential impacts to cultural landscapes and places of traditional or sacred significance.

To the extent feasible, trails would be constructed to avoid or minimize impacts to the traditional values of such places.

Trails created by mammal tracking activities that intersect constructed trails would have posted signs educating or restricting use by visitors.

New structures to be constructed within historic districts, or near historic structures will be designed by qualified architects well-versed in the Secretary of the Interior standards to ensure the highest level of design compatibility.

Transportation

The visual and recreational elements of Mulholland Drive and Highway would be promoted and preserved. There would be support for limiting roadway expansion and for improved management of the PCH. Transportation centers would be developed, and transportation education would be provided. Alternative fuels would be used. Bicycling on paved routes and developed trails, as well as bicycle parking racks, would be encouraged as an alternative form of transportation.

Mitigation would include the promotion and development of transit operations and ridesharing programs, which would help reduce the number of vehicles using the commuter corridors through the SMMNRA.

Preferred Alternative

CONCEPT

This alternative incorporates the exceptional elements of the following three alternatives. Significant natural and cultural resources would be protected while providing compatible recreation (hiking, wildlife observation) and increased educational opportunities to a diverse public.

Private recreation service providers would be encouraged to meet growing demand for recreational services and facilities.

Approximately 80 percent of parkland would be designated low intensity. Moderate intensity areas would act as a buffer around urban areas and scenic corridors in some instances. Only designated trails would be multiuse. Small pockets of concentrated high intensity activities would be located in non-sensitive or previously developed areas. Figure 6 illustrates the management areas and facilities proposed under the preferred alternative.

MANAGEMENT AREAS

Low Intensity

As stated above, approximately 80 percent of the park area would be designated low intensity. Facilities would be maintained in a relatively primitive manner to preserve the visitor experience. The only modifications to this environment within the SMMNRA boundary would be for the purposes of protecting the resources from the impacts of use. Wildlife corridors would be identified and protected. Natural processes would be allowed to continue unimpeded except when active manipulation to manage for native biological diversity or rare, threatened, or endangered species of communities was deemed appropriate. Historical and ethnographic resources would be preserved and protected.

A boundary adjustment study would be suggested for the following areas: the western escarpment of the Santa Monica Mountains (to buffer some of the impacts of the CSUCI expansion and associate development on the western edge of the park), the area around Las Virgenes Reservoir, and a portion of Ladyface.

Agreements would be pursued with other land management agencies to ensure that the area north of SMMNRA into the Conejo Valley and from Simi Hills to Santa Susanna Pass would be protected as a critical wildlife corridor and open space.

NPS parklands north and west of Circle X Ranch would be inventoried for potential addition to the National Wilderness Preservation System.

Land prone to repeated hazard due to natural disasters would be proposed to FEMA for accelerated acquisition.

Lagoons, coastal wetlands, estuaries and marine interface areas would receive focused protection and management through the use of general agreements with land use regulatory agencies, research agencies and university research. Steelhead trout re-introduction would be attempted in Solstice Creek, Malibu Creek, and Arroyo Sequit. Nonhistoric trails and recreation would be relocated away from sensitive areas. Lagoons, coastal wetlands and interface areas would receive focused attention.

Simi Hills would be managed to maximize biological habitat while preserving ethnographic historic sites and cultural landscapes. Pictographs would be in low intensity areas and would be interpreted at visitor centers and at exhibits in high intensity areas.

Moderate Intensity

Approximately 15 percent of the area within the park boundary would be moderate intensity. Boundary adjustment studies would be proposed for the area east of Hidden Valley, the southern part of Ladyface, Las Virgenes Reservoir, Ladyface, Marvin Braude Mulholland Gateway Park, Stone Canyon, and the area north and west of Yerba Buena Road to protect critical open space and preserve wildlife corridors.

With more than a thousand archeological sites documented within the SMMNRA boundary, a nomination package would be submitted to the National Register of Historic Places to designate an archeological district.

The Backbone Trail would be completed with eight additional group or multiday individual campsites along the length of the trail, as suggested by the Santa Monica Mountains Area Recreational Trails (SMMART) Coordination Project Report. As part of the Backbone Trail, a bicycle trail reroute around the Boney Mountain Wilderness would be constructed.

Existing facilities and trails would be analyzed for impacts; if damage was occurring, the trail would be redesigned.

A trail management plan would be developed to address trail management and trail improvement needs.

High Intensity

Approximately 5 percent of area within the park boundary would be "high intensity." Resource-compatible recreation would be encouraged (hiking, wildlife observation), and environmental education programs would be increased.

The development of the following park facilities would occur:

- ***Mugu Lagoon Visitor Education Center*** – would be located at the western end of the park off the PCH. This facility would emphasize use of sustainable energy and materials through a working education demonstration. Mugu Lagoon, managed by the U.S. Navy, is the largest coastal wetland in California outside the San Francisco Bay area. The NPS would play a greater role in the administration of the lagoon, in cooperation with the Navy. This facility would provide an important interpretation point for the estuarine ecosystem. The proposed site for the education center would be in an already disturbed area off of the PCH. A boardwalk around the lagoon would allow visitors an opportunity to experience the lagoon system. This location allows beautiful views of the coast, an unspoiled view of the mountains, and a panorama of the lagoon.
- ***Circle X Ranch*** – would become a primitive overnight education camp with expanded facilities for group camping. The upper levels of the site would be redesigned and re-developed to offer a quality, accessible camping experience. Sustainable architectural design practices would be used and resources would be protected in the siting of any new structures. The facilities would also offer improved access to backcountry recreation trails, including the Backbone Trail.
- ***Paramount Ranch*** – would include facilities for a film history education center and museum. Film production would be encouraged as a means to preserve a traditional use associated with the facility. The western town set at Paramount Ranch and the surrounding landscape would be adaptively reused for filming. Parking and circulation would be improved to accommodate visitation while protecting the cultural landscape.
- ***White Oak Farm*** – located near the intersection of Mulholland Highway and Las Virgenes Canyon Road would offer interpretive and education programs.
- ***The barn at Rancho Sierra Vista*** – would be adaptively reused for environmental education.
- ***The Morrison House*** – would be rehabilitated to reflect the ranching period. The cultural landscape surrounding the house would be maintained. The Morrison Ranch House and cultural landscape would be restored.
- ***A scenic coastal boat tour*** – would offer visitors a unique view of the coastline and mountain scenery. Docking points would be at the Santa Monica Pier and Malibu Pier, where there would also be a visitor contact station.
- ***A visitor education center*** – would be located at Malibu Bluffs. This location would serve as a staging area and orientation for park facilities such as the Adamson House, Malibu Lagoon and Malibu Pier.
- ***A jointly operated administration, environmental and cultural education center*** – would be at the Gillette Ranch site near the intersection of Mulholland Highway and Las Virgenes Canyon Road. The NPS and CSP would

MANAGEMENT AREAS:

LOW INTENSITY AREA

Emphasis would be on natural and cultural resource preservation and a sense of being immersed in a natural and wild landscape away from the comforts and conveniences of "civilization." The sights and sounds of nature in this area would be more prevalent than that of humans. There would be no overnight uses. Hiking, biking, and horseback riding would only be on designated trails.

MODERATE INTENSITY AREA

Emphasis would be predominantly on the natural environment, but there would also be a sense of being near the familiarity, comforts, and convenience of "civilization." Facility development would harmonize with the natural setting and be based on the principles of sustainable development as described under the parkwide goals. Hiking, biking, and horseback riding on designated trails, low-impact camping, and self-guided and guided interpretive walks would be acceptable activities. Moderate use areas would act as an insulating buffer around urban development.

HIGH INTENSITY AREA

Emphasis would be on facility development that harmonizes with natural and cultural settings. There would be a sense of being surrounded by the scenic landscape and cultural resources of a unit of the national park system. The sights and sounds of people and development within and outside the area would be readily apparent. There would be frequent encounters with vehicles, other types of visitors, and park staff. Activities would include hiking, biking and horseback riding on designated trails, self-guided trails, visitor orientation, camping, educational activities and study programs, picnicking, interpretive walks, events and festivals, day camps, and community activities.

SCENIC CORRIDOR

Emphasis would be on roads through scenic landscapes and cultural resources of the park. People would experience the park by driving on scenic roads. During some seasons, days, and times of day there would be extensive interaction with other vehicles. Surrounding new development would harmonize with the scenic quality of the landscapes and be based on the principles of sustainable development. Environmental impacts from road development, management, and visitor use would be mitigated. Activities such as picnicking; self-guided tours; viewing the park by car, motorcycle, or bus, bikes, and hiking along segregated trails or lanes would be encouraged.

COMMUNITY LANDSCAPE

Emphasis would be on private development that has unique character, architecture, or landscape and that deserves special recognition. However, the designation does not suggest any type of management other than technical assistance.

1. MUGU LAGOON VISITOR EDUCATION CENTER.
2. RANCHO SIERRA VISTA BARN TO BE ENVIRONMENTAL EDUCATION CENTER.
3. CIRCLE X RANCH PRIMITIVE CAMP
4. PARAMOUNT RANCH FILM HISTORY CENTER AND MUSEUM
5. BACKBONE TRAIL TO BE COMPLETED WITH 6 CAMPSITES
6. MORRISON RANCH HOUSE AND CULTURAL LANDSCAPE RESTORED
7. LOS VIRGENES ENVIRONMENTAL EDUCATION CENTER (OPERATED BY OTHERS)
8. GILLETTE RANCH JOINT ADMINISTRATION AND ENVIRONMENTAL EDUCATION CENTER.
9. MALIBU BLUFFS VISITOR EDUCATION CENTER.
10. MALIBU PIER VISITOR CONTACT STATION
11. SCENIC COASTAL BOAT TOUR.
12. 415 PCH SANTA MONICA / PACIFIC COAST HIGHWAY VISITOR INFORMATION SITE
13. LAX VISITOR CONTACT SITE
14. DOWNTOWN LOS ANGELES / OLVERA ST. (EL PUEBLO) VISITOR CONTACT STATION

PREFERRED ALTERNATIVE

EMPHASIS WOULD BE ON INCORPORATING ELEMENTS OF ALL THREE ALTERNATIVES USING RESOURCE PRESERVATION AS THE DRIVING FORCE.

EXCEPTIONAL EDUCATION OPPORTUNITIES THAT DO NOT COMPROMISE RESOURCE PRESERVATION AND SERVE A DIVERSE PUBLIC WOULD BE PROVIDED. DEVELOPMENT WOULD TAKE PLACE ONLY IN PREVIOUSLY DISTURBED AREAS.

APPROXIMATELY 80% OF AREA WOULD BE DESIGNATED "LOW INTENSITY;" THEREFORE, VISITOR ACCESS TO SENSITIVE RESOURCES WOULD NOT BE FACILITATED OR ENCOURAGED. MODERATE USE AREAS WOULD ACT AS A BUFFER FOR THE PRESERVATION AREA.

Figure 6:

PREFERRED ALTERNATIVE

SANTA MONICA MOUNTAINS NATIONAL RECREATION AREA CALIFORNIA

INCLUDES UNITS OF NPS, CALIFORNIA STATE PARKS, AND THE SANTA MONICA MOUNTAINS CONSERVANCY

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DSC • February 2002 • 638 • 20071a

house administration and curatorial functions at this location. Some of the existing buildings would be adapted for classroom use.

- ***415 PCH (Marion Davies Home)*** – located near the Santa Monica Pier, the facility would serve as an eastern gateway to the national recreation area and provide visitor orientation to the park. Exhibits would interpret the evolution of southern California coastal culture, the history of PCH and the terminus of Historic Route 66. Congress recently passed legislation to preserve the cultural resources of the Route 66 corridor.
- ***A visitor information site*** – would be located in the Los Angeles International Airport to provide orientation to the Santa Monica Mountains National Recreation Area and serve as a retail sales site for park merchandise.
- ***The William O. Douglas Outdoor Center*** – at Franklin Canyon would offer an expanded educational day camp program for Los Angeles County schools.
- ***A visitor information site*** – would be in downtown Los Angeles at El Pueblo, providing park orientation, information and an introduction of recreation and learning opportunities in the mountains to inner city populations.
- ***The lands indicated on the map*** – portions of the northern and western edges of the park are intended to protect habitat and wildlife corridors and act as buffers against further development .
- ***An archeological district of the SMMNRA*** – would be documented and nominated to the national register.

Scenic Corridor

Scenic corridors are designated for Mulholland Highway, PCH from Pt. Mugu to Malibu Bluffs, and Malibu Canyon Road from Malibu Bluffs to the Mulholland Highway. Part of this route (Malibu Canyon Road from Malibu Bluffs to Mulholland, Mulholland to Sequit Point and back to Malibu Bluffs) would comprise a scenic loop with several destination points, which would be an opportunity for an interpretive tour operated by a concession. These roadways are significant for their visual quality and as recreation transportation routes. A tour shuttle would travel Mulholland, PCH, and Malibu Canyon Road, connecting points of interest such as the Adamson House, Malibu Lagoon, Gillette Ranch, White Oak Ranch, Paramount Ranch, Leo Carrillo State Park, and Point Dume State Preserve in a circular route. A shuttle service could serve these multiple points of interest as well as dropping and picking up visitors at designated points along this loop.

View of Malibu Canyon and the Pacific Ocean (NPS photo).

Mulholland would be cooperatively managed to emphasize its continuity, historic significance, and scenic values.

The establishment of agreements and design review boards would ensure that proposed developments are evaluated and

found to be consistent with the scenic values of the corridors.

SUMMARY OF MITIGATION MEASURES

The following is a summary of additional mitigation measures specific to the preferred alternative:

Water Resources

Restroom facilities would be planned to eliminate the delivery of pathogens to groundwater or surface water. A soils and engineering evaluation would be conducted by a qualified geologist to support the location and design of all septic system repairs, upgrades and installations.

If on-site surface or groundwater would be used as a potable water source for new camp facilities, the participating agencies would study sources of drinking water for camps to avoid the over-extraction of water.

Biological Resources and Wetlands

New facility development would be carefully sited to avoid or minimize impacts on wetlands, wildlife corridors, and native habitats that are significant, sensitive or previously undisturbed areas. Where appropriate and feasible, the natural integrity of adjacent areas would be restored.

Best management practices would be implemented during construction. For example, if construction would occur during the rainy season, temporary sedimentation retention basins could be required on some projects. In addition, servicing of construction vehicles could be prohibited within 100 feet of riparian corridors, or disturbances of native vegetation or the root zones of oak trees could be avoided by staking construction staging areas.

Fire clearance zones would be incorporated into the planning of developments.

Educational efforts, such as posting fire hazard signs, would be effective in reducing the likelihood of visitor caused fires, and their resultant impacts.

If vegetation is lost or disturbed from any visitor-related activity, the area would be rehabilitated or revegetated with species from an appropriate native plant palate from local seed/plant sources.

Habitat connectivity would be maintained by open space links of sufficient width between significant habitat areas.

Whenever possible, documented wildlife movement areas would be improved with the appropriate NEPA/CEQA documentation prepared for that project.

Cultural Resources

All construction or revegetation projects involving ground disturbance would be preceded by a cultural resource inventory, evaluation, and impact assessment program conducted by a qualified cultural resources specialist. If necessary, mitigation measures, including avoidance or data recovery, would be developed and implemented.

A monitoring program that would assess the rate and nature of impacts to cultural resources in the vicinity of trails and other high intensity use areas would be established. This program would focus on a subset of resources, and the results extrapolated to similar settings. Should monitoring reveal the acceleration or degradation of cultural resources to an unacceptable level, mitigation measures would be developed in consultation with recreational groups, the SHPO, and concerned Native American Indian groups. Such measures would include avoidance, data recovery, access restriction, signs, visitor education, and similar actions.

A qualified archeologist would complete a cultural resources inventory, including subsurface exploration, prior to the finalization of plans associated with the development of the Point Mugu Visitor Center, to assess the potential to adversely impact archeological deposits in this area. If such deposits were identified, mitigation through avoidance or data recovery would be undertaken. Monitoring by a qualified archeologist and appropriate Native American Indian representation would also accompany any ground-disturbing activities. If unknown resources were identified at this time, construction would be halted until the significance of the find is determined.

To assist with visitor education, the Point Mugu Visitor Center would include information on traditional lifeways and the significance of the settlement of *Muwu* to the cultural history of the area.

Prior to the implementation of construction, the area of potential effect (APE) for cultural resources would be defined, a record review conducted, and a pedestrian survey completed by a qualified archeologist. Mitigation measures, including avoidance or data recovery, would be proposed if resources are identified, and the SHPO would be afforded the opportunity to consult on measures for cultural resources protection and mitigation of adverse impacts.

Monitoring by a qualified archeologist and an appropriate tribal monitor would accompany any ground disturbing construction. In the case of any unanticipated discoveries, all ground-disturbing activities in the vicinity would be stopped until the significance of the find is determined.

Compliance with Section 106 of the NHPA and CEQA would be required for all construction activities that alter the historic characteristics of the Leo Carrillo State Park property, Paramount Ranch, the Gillette Ranch and 415 PCH (Marion Davies Home). Specifically, an inventory, evaluation, and impact assessment program would be carried out, followed by mitigation if necessary. Mitigation measures could include avoidance, archeological data recovery, or data recovery through Historic American Buildings Survey/Historic American Engineering Record (HABS/HAER) documentation. Those measures would be carried out in accordance with the *Secretary of the Interior's Standards for the Treatment of Historic Properties* (1995).

At the Gillette Ranch and William O. Douglas Outdoor Classroom (WODOC), monitoring by a qualified archeologist and a Native American Indian would accompany any ground-disturbing activities. In the event that unidentified resources are discovered, construction would be halted until the significance of the find is evaluated. Concerned historic preservation groups would be consulted and their input incorporated into the management plan for this facility.

All road improvements would be preceded by a cultural resources investigation conducted by an historical landscape architect or landscape historian, inclusive of inventory, evaluation, and impact assessment. If resources were identified, mitigation measures would include avoidance or data recovery. Opportunities to protect the resource from other impacts could include traffic volume control, parking control, and expanded transit options. As a result, these impacts could be reduced to negligible levels.

The Secretary of the Interior's Standards for the Treatment of Historic Properties (1995) would be followed for any projects affecting historic or cultural resources at Paramount Ranch, Peter Strauss Ranch, Rancho Sierra Vista, Morrison Ranch, Gillette Ranch, 415 PCH (Davies Home) and Liberty and Solstice Canyons.

Visitor Experience

Improve existing trials, and create new trails and adequate camping areas in low and moderate intensity use areas.

Private recreation service providers would be encouraged to meet growing demand for recreational services and facilities.

Land Use and Socioeconomic Environment

Transportation

It may be desirable at some proposed visitor use sites to provide a designated left turn lane on the adjacent roadway to minimize traffic conflicts and make site access easier.

Preservation Alternative

CONCEPT

Emphasis would be on preserving all natural and cultural systems. Some park-related development and uses would be removed, and trails would be retained. Any trails in sensitive areas would be rerouted. Existing facilities and trails would be analyzed for impacts and removed if damaging. Some fire roads would be eliminated. Parking in low impact areas would be constructed with gravel or other pervious material wherever possible in order to preserve the natural scenery. The Mediterranean ecosystem could improve in condition and flourish into the future. More interpretive exhibits would provide people with opportunities to understand and value the ecosystem. As technology and cost permit, visitors would have the opportunity to visit, explore and learn about the Santa Monica Mountains through a variety of virtual media "visitor centers" and interactive web sites. Visitors could explore scientific archives, chat with an interpretive ranger and other park visitors about recreation opportunities and participate in virtual recreation experiences. Among the unique opportunities that could be developed as virtual experiences are surfing in Malibu, aerial tours of the mountains and coastline, tours of caves and waterfalls, wildflower tours and tours of the historic motion picture productions. These alternative experiences and information sites would serve to preserve resources by increasing appreciation and knowledge while reducing visitor disturbances in sensitive resource locations. Figure 7 illustrates the management areas and facilities proposed as part of the preservation alternative.

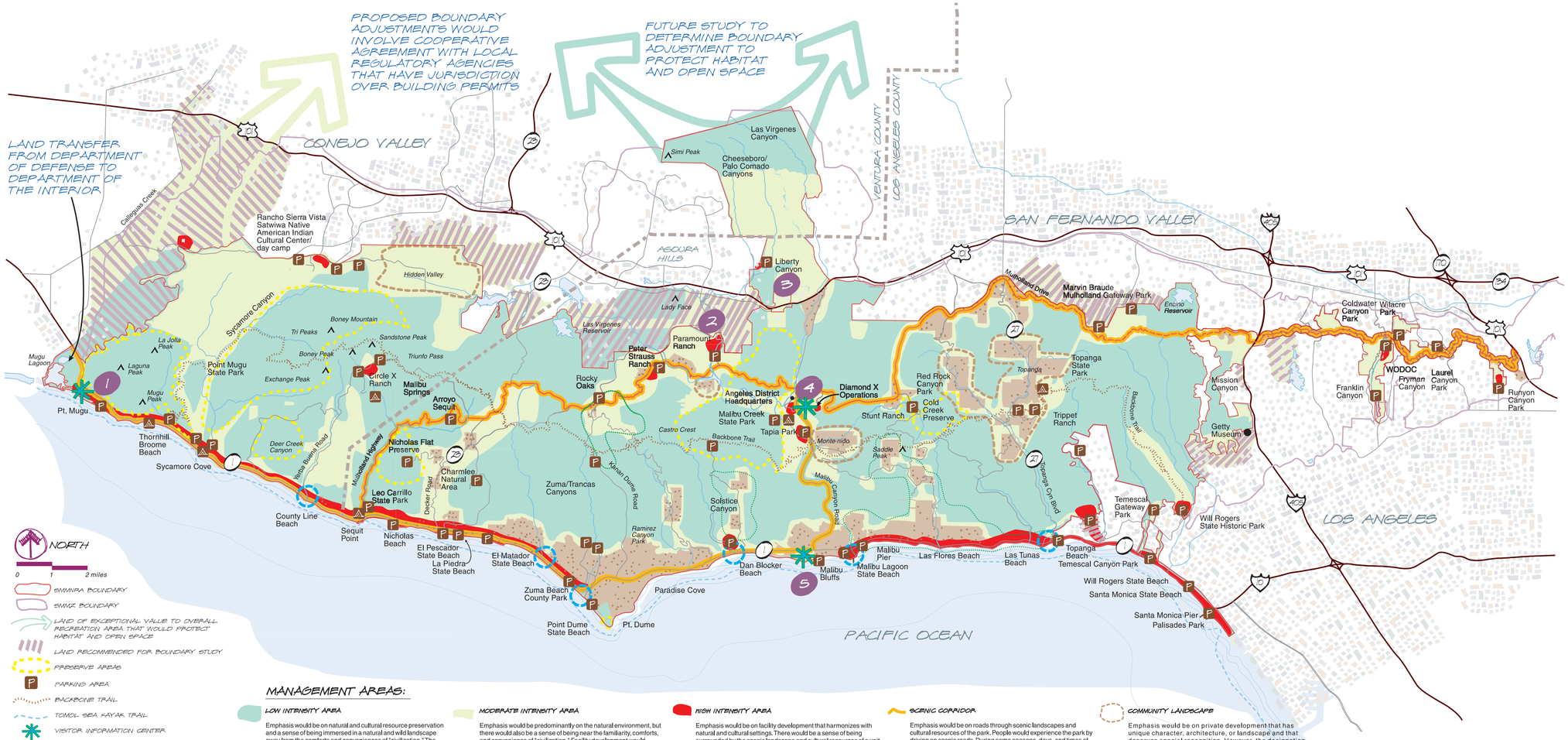
MANAGEMENT AREAS

Low Intensity

Approximately 80 percent of the parklands would be in a low intensity area. Developed areas would not be expanded and existing facilities would be maintained in a relatively primitive manner to preserve the visitor experience. Non-historic disturbed areas, or those areas without ethnographic value, would be restored to natural conditions. Modifications to the environment would be for the purpose of protecting the natural and cultural resources from the impacts of use. Modifications to existing facilities may be undertaken to protect resources, for public safety, or to promote the primitive character of the visitor experience.

NPS parklands north and west of Circle X Ranch would be inventoried for potential addition to the National Wilderness Preservation System.

The western escarpment of the Santa Monica Mountains, a portion of Ladyface Mountain, and the area around Las Virgenes Reservoir would be proposed for subsequent study for addition to the SMMNRA. If Congress adds these areas, they would be designated by this plan as "low intensity" areas. These areas are believed to be critical



MANAGEMENT AREAS:

LOW INTENSITY AREA

Emphasis would be on natural and cultural resource preservation and a sense of being immersed in a natural and wild landscape away from the comforts and conveniences of "civilization." The sights and sounds of nature in this area would be more prevalent than that of humans. There would be no overnight uses. Hiking, biking, and horseback riding would only be on designated trails.

MODERATE INTENSITY AREA

Emphasis would be predominantly on the natural environment, but there would also be a sense of being near the familiarity, comforts, and convenience of "civilization." Facility development would harmonize with the natural setting and be based on the principles of sustainable development as described under the parkwide goals. Hiking, biking, and horseback riding on designated trails, low-impact camping, and self-guided and guided interpretive walks would be acceptable activities. Moderate use areas would act as an insulating buffer around urban development.

HIGH INTENSITY AREA

Emphasis would be on facility development that harmonizes with natural and cultural settings. There would be a sense of being surrounded by the scenic landscape and cultural resources of a unit of the national park system. The sights and sounds of people and development within and outside the area would be readily apparent. There would be frequent encounters with vehicles, other types of visitors , and park staff. Activities would include hiking, biking and horseback riding on designated trails, self-guided trails, visitor orientation, camping, educational activities and study programs, picnicking, interpretive walks, events and festivals, day camps, and community activities.

SCENIC CORRIDOR

Emphasis would be on roads through scenic landscapes and cultural resources of the park. People would experience the park by driving on scenic roads. During some seasons, days, and times of day there would be extensive interaction with other vehicles. Surrounding new development would harmonize with the scenic quality of the landscapes and be based on the principles of sustainable development. Environmental impacts from road development, management, and visitor use would be mitigated. Activities such as picnicking; self-guided tours; viewing the park by car, motorcycle, or bus, bikes, and hiking along segregated trails or lanes would be encouraged.

COMMUNITY LANDSCAPE

Emphasis would be on private development that has unique character, architecture, or landscape and that deserves special recognition. However, the designation does not suggest any type of management other than technical assistance.

1. MUGU LAGOON VISITOR EDUCATION CENTER.
2. PARAMOUNT RANCH FILM HISTORY CENTER.
3. MORRISON HOUSE WOULD BE REHABILITATED
4. GILLETTE RANCH JOINT ADMINISTRATION AND ENVIRONMENTAL EDUCATION CENTER.
5. MALIBU BLUFFS VISITOR EDUCATION CENTER.

PRESERVATION ALTERNATIVE

EMPHASIS WOULD BE ON PRESERVING ALL NATURAL SYSTEMS AND DEVELOPING STRONG ENVIRONMENTAL MONITORING PROGRAMS.

THE ECOSYSTEM IS SUFFICIENTLY RARE TO WARRANT ITS PRESERVATION AS A NATURAL RESERVE. MOST PARK-RELATED DEVELOPMENT AND USES WOULD BE REMOVED, AND TRAILS WOULD BE RETAINED, IN SENSITIVE AREAS, REROUTED, AND EXPANDED ALONG THE BACKBONE TRAIL. SOME FIRE ROADS MIGHT BE ELIMINATED. PARKING WOULD BE 'LOW INTENSITY' WHEREVER POSSIBLE IN FAVOR OF PRESERVING AND ENHANCING NATURAL PROCESSES. THE MEDITERRANEAN ECOSYSTEM COULD IMPROVE IN CONDITION AND FLOURISH INTO THE FUTURE. MOST PEOPLE COULD LEARN TO UNDERSTAND AND VALUE THIS ECOSYSTEM THROUGH INTERACTIVE INTERPRETIVE PROGRAMS USING CUTTING-EDGE TECHNOLOGY. SENSITIVE HISTORICAL AND ETHNOGRAPHIC RESOURCES ARE PRESERVED AND PROTECTED.

APPROXIMATELY 80 % OF AREA WOULD BE DESIGNATED 'LOW INTENSITY'; THEREFORE, VISITOR ACCESS TO SENSITIVE RESOURCES WOULD NOT BE FACILITATED OR ENCOURAGED. MODERATE USE AREAS WOULD ACT AS A BUFFER FOR THE PRESERVATION AREA.

Figure 7:

PRESERVATION ALTERNATIVE

SANTA MONICA MOUNTAINS NATIONAL RECREATION AREA CALIFORNIA

INCLUDES UNITS OF NPS, CALIFORNIA STATE PARKS, AND THE SANTA MONICA MOUNTAINS CONSERVANCY

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additions to core habitats and/or potential wildlife corridors, and would provide buffers against development, but could only be added through donation.

Wildlife corridors would be identified and protected. Watershed/marine interface zones would be protected and restored.

Lagoons, coastal wetlands and marine interface areas would receive focused protection and management through the use of general agreements with land use regulatory agencies, research agencies and university research.

Unlike other alternatives that provide for steelhead trout reintroduction in Solstice Creek, this alternative would expand steelhead reintroduction to Calleguas Creek There would be steelhead trout enhancement in Malibu, Solstice and Arroyo Sequit watersheds.

The eastern portion of the Mugu Lagoon would be recommended for immediate transfer from the Department of Defense to the National Park Service.

Simi Hills would be managed to maximize biological habitat while preserving ethnographic and historic sites.

Pictographs would be in low intensity areas. Pictographs would be interpreted at visitor centers and at exhibits in high intensity areas.

An archeological district of the SMMNRA would be documented and nominated to the national register.

Agreements would be pursued with other land management agencies to ensure that the area north of SMMNRA into the Conejo Valley and from Simi Hills to Santa Susanna Pass would be protected as a critical wildlife corridor and open space.

Moderate Intensity

A little more than 15 percent of parklands would be considered moderate intensity areas. These areas would act as buffers for adjacent development. These lands would provide opportunities for the majority of the dispersed recreational use with multi-use trails, with only the essential visitor services such as trailhead parking with gravel or permeable surfaces, restrooms and limited numbers of low impact camping areas. Moderate intensity areas surround and filter in and out of developed areas.

Boundary adjustment studies are recommended at the area north into Conejo Valley, a portion of the western escarpment of the Santa Monica Mountains adjacent to the Oxnard Plains, the southeast portion of Calleguas Creek (to address the protection of the watershed as a wildlife corridor and wetland resource), the southern part of Ladyface, the area east of Hidden Valley, Stone Canyon, Marvin Braude Mulholland Gateway Park, Mission Canyon, the area north and west of Yerba Buena Road, the Getty Museum, and Triunfo Canyon. These lands are required to protect critical core habitat and provide a spatial buffer to adjacent urban development. Studies would be conducted to determine the exact configuration of these boundary adjustments.

The Morrison House would be rehabilitated to reflect the historic ranching period. The cultural landscape around the house would be preserved.

Environmental education programs would be increased.

High Intensity

A little less than 5 percent of the parklands would receive a high level of use. These areas would be located on the road interfaces of the park in areas that already receive extensive use, are disturbed or densely populated. Resource-compatible recreation would be encouraged (hiking, wildlife observation). Only designated trails would be multiuse.

- ***Mugu Lagoon Visitor Education Center*** – would be located at the western-most end of the park off PCH. This facility would emphasize the use of sustainable energy and materials. Mugu Lagoon, managed by the U.S. Navy, is the largest coastal wetland in California outside the San Francisco Bay area. This facility would act as the western gateway and visitor orientation to the park and would provide an important interpretation point for the estuarine ecosystem. The proposed site for the education center would be located in an already disturbed area off PCH. A boardwalk into the lagoon would allow visitors an opportunity to experience the lagoon system. This location allows exceptional views of the coast, an unspoiled view of the mountains, and a panorama of the lagoon.
- ***The overnight use at Leo Carrillo State Beach, Malibu Creek State Park and Point Mugu State Park*** – would remain.
- ***Technology*** – would be used to provide a virtual park experience at visitor centers outside the park.
- ***Paramount Ranch*** – would include facilities for a film history center and an administrative center. The western town set would be returned to its historic character and the historic landscape restored. Parking and circulation would be improved to accommodate visitation while protecting the historic landscape.
- ***A jointly operated administration, environmental and cultural education center*** – would be located at the Gillette Ranch site near the intersection of Mulholland Highway and Las Virgenes Canyon Road. The NPS and CSP would house operations, curatorial and management functions at this location. Existing historic buildings would be restored and other buildings would be adapted for classroom use. The education emphasis would be associated with cultural resources and fine arts.
- ***There would be a visitor education center at Malibu Bluffs.*** – This facility would be jointly operated by the NPS and CSP and would provide a general SMMNRA orientation and staging site for visitors to Malibu Lagoon, Malibu Pier, and the Adamson House.
- ***The William O. Douglas Outdoor Center*** – located at Franklin Canyon would offer an expanded educational day camp program for Los Angeles area schools.
- ***Pictographs*** – would be recreated by Native American specialists for educational purposes near areas where there is high visitation.

Scenic Corridor

An interior loop including PCH could be designated as a scenic tour route capable of connecting unique scenic and cultural sites for visitor interpretation and education. A shuttle service could serve these multiple points of interest as well as dropping and picking up hikers and surfers at designated points along this loop. The loop would consist of Malibu Canyon Road, Mulholland Highway to Sequit Point where it intersects with PCH, and east along PCH to the point of beginning at Malibu Bluffs.

In addition, that portion of PCH from Point Mugu to Sequit Point, as well as the entire length of Mulholland Highway, would also be designated as a scenic corridor.

Mulholland would be cooperatively managed to emphasize its continuity, historic significance, and scenic values.

The establishment of general agreements and design review boards would ensure that proposed developments are evaluated for consistency with the scenic values of the corridors.

SUMMARY OF MITIGATION MEASURES

The following is a summary of additional mitigation measures specific to the preservation alternative:

Water Resources

Restroom facilities would be planned to eliminate the delivery of pathogens to groundwater and surface water. A qualified engineer would conduct a soils and engineering evaluation to support the location and design of all septic system repairs, upgrades and installations.

Biological Resources and Wetlands

Best management practices would be implemented during construction.

Fire clearance zones would be incorporated into the planning of developments.

Educational efforts, such as posting fire hazard signs, would be implemented to reduce the likelihood of visitor-caused fires, and their resultant impacts.

If vegetation is lost or disturbed from any activity, the area would be rehabilitated or revegetated with species from an appropriate native plant palette.

New developments would be excluded from existing wildlife corridors, or minimized to the greatest extent practicable, to ensure the continued exchange of genes and individuals between wildlife populations within and adjacent to the SMMNRA.

Habitat connectivity would be maintained by establishing sufficiently wide (greater then 400 feet) habitat linkages between major blocks of habitat.

The participating agencies would consider the feasibility of retrofitting wildlife underpasses where primary roads intersect with wildlife movement areas within the recreation area in NEPA/CEQA documentation prepared for projects that might affect habitat linkages within their sphere of influence.

Cultural Resources

A monitoring program that would assess the rate and nature of impacts to cultural resources in the vicinity of trails and other high intensity use areas would be established. This program would focus on a subset of resources, and the results extrapolated to similar settings. Should monitoring reveal the acceleration or degradation of cultural resources to an unacceptable level, mitigation measures would be developed in consultation with recreational groups, the SHPO, and concerned Native American Indian groups. Such measures would include avoidance, data recovery, access restriction, signs, visitor education, and similar actions.

All construction or revegetation projects involving ground disturbance would be preceded by a cultural resource inventory, evaluation, and impact assessment program conducted by a qualified cultural resources specialist. If necessary, mitigation measures, including avoidance or data recovery, would be developed and implemented.

A cultural resource inventory, evaluation, and impact assessment program conducted by a qualified archeologist would precede all ground-disturbing activities. If cultural resources were identified, consultation under Section 106 will be initiated and will include not only SHPO but concerned individuals, groups and tribes in order to reduce the potential impacts and, if necessary, mitigate them.

Management plans developed or amended to accommodate overnight uses in the vicinity of historic settlements would be reviewed by the qualified staff for conformance with applicable federal, state, and local statutes and regulations regarding cultural resources. If necessary, these plans would incorporate measures to reduce or

eliminate potential impacts to cultural resources. Such measures might include restrictions on access, signage, visitor education, or data recovery.

A cultural resources inventory, including subsurface exploration, would be completed by a qualified archeologist prior to the finalization of plans associated with the Mugu Lagoon Visitor Education Center, to assess the potential to adversely impact archeological deposits in this area. If necessary, mitigation through avoidance or data recovery would be undertaken. Monitoring by a qualified archeologist and a representative Native American Indian monitor would also accompany any ground-disturbing activities. To assist with visitor education, the Mugu Lagoon Visitor Education Center would include information on traditional lifeways and the significance of the settlement of *Muwu* to the cultural history of the area.

Compliance with Section 106 of the NHPA would be required for all rehabilitation actions that effect historic or cultural resources at Leo Carrillo State Park.

Compliance with Section 106 of the NHPA and CEQA would be required for all construction activities that alter the historic characteristics of the Paramount Ranch and the Morrison House property. Specifically, an inventory, evaluation, and impact assessment program would be carried out, followed by mitigation if necessary. Mitigation measures could include avoidance, data recovery through Historic American Buildings Survey/Historic American Engineering Record (HABS/HAER) documentation, reconstruction using historically appropriate materials, or similar measures, in accordance with the *Secretary of the Interior's Standards for the Treatment of Historic Properties* (1995).

A qualified archeologist would complete a cultural resources inventory, including subsurface exploration, prior to the finalization of plans associated with the administration and education center at the Gillette Ranch facility, the WODOC and the Malibu Bluffs visitor center to assess the potential to adversely impact archeological deposits in this area. If resources were identified, mitigation through avoidance or data recovery would be undertaken. Monitoring by a qualified archeologist and a Native American Indian would also accompany any ground-disturbing activities. In the even that unknown resources are encountered, all construction activities in the vicinity would be halted until the significance of the find is evaluated and an appropriate course of action is defined. Concerned historic preservation groups would also be consulted and their input incorporated into the management plan for this facility.

The documentation that would accompany the designation of Mulholland Drive as a scenic corridor would provide information that could be integrated into the management of this resource. A cultural resources inventory, evaluation, and impact assessment conducted by a qualified archeologist, historical landscape architect, or landscape historian followed by mitigation through avoidance, data recovery, or other measures, if necessary, would precede all road improvements. Other effects might require mitigation through traffic control, access restriction, and visitor education. Regulations regarding protection of historic properties would be posted and included in handouts, pamphlets, brochures, or other printed materials intended for visitor use.

The *Secretary of the Interior's Standards for the Treatment of Historic Properties* (1995) would be followed for any projects effecting cultural resources at Peter Strauss Ranch, Solstice Canyon, Paramount Ranch and Rancho Sierra Vista.

Visitor Experience

Improve existing trails, and create new trails and adequate camping areas in moderate intensity use areas.

Private recreation service providers would be encouraged to meet growing demand for recreation services and facilities.

Land Use and Socioeconomic Environment

Transportation

It may be desirable at some proposed visitor use sites to provide a designated left turn lane on the adjacent roadway to minimize traffic conflicts and make site access easier.

Education Alternative

CONCEPT

The emphasis in this alternative would be on developing stronger environmental and cultural educational programs that reach the public, especially the school systems. Working through innovative partnership with the Los Angeles Unified School District to provide the "Parks and Classrooms" program, the goal would be to deliver an outdoor experience to every child in Los Angeles. In this manner, the national recreation area could inspire the people of the greater Los Angeles area to claim inheritance of and stewardship for the parklands. Resource-compatible recreation would be encouraged.

All proposed facilities would have a strong educational dimension. Overnight educational camps would be available to groups.

Nonhistoric trails would be retained, but in sensitive areas, rerouted. Pictographs would be accessible by trail and actively interpreted to the public. Some dirt roads may be eliminated. Parking would be constructed of gravel or permeable surfaces in low impact areas wherever feasible in favor of preserving and enhancing natural processes and cultural character. The Mediterranean ecosystem would be protected and enhanced for long-term sustainability. People could learn to understand and value this ecosystem through interactive interpretive programs using cutting edge technology, and school environmental education programs. Figure 8 illustrates the management areas and facilities proposed as part of the education alternative.

MANAGEMENT AREAS

Low Intensity

Approximately 80 percent of the SMMNRA would be designated low intensity. Facilities would be maintained in a relatively primitive manner to preserve the visitor experience. Previously disturbed areas would be restored to natural conditions. The only modifications to this environment within the park boundary would be for the purposes of protecting the resources from the impacts of use. Trails within this area with high learning potential might be complimented with narrative brochures but no physical development.

Sensitive historical and ethnographic resources would be preserved and protected. A boundary adjustment study would be done for the western escarpment of the Santa Monica Mountains for inclusion in the SMMNRA to buffer some of the impacts of the California State University Channel Islands (CSUCI) expansion and associated development on the western edge of the park.

Moderate Intensity

Approximately 15 percent of the parkland would be designated moderate intensity.

Moderate intensity areas would act,

in part, as buffers against development to protect habitat and wildlife corridors for the preservation areas. Only designated trails would be multiuse. In these areas resource protection would be balanced with visitor use and education activities, with more emphasis on the natural and cultural resources. Most of the areas would be targeted for cooperative planning using general agreements rather than fee acquisition.

The open space east of Hidden Valley, as well as Marvin Braude Mulholland Gateway Park, Ladyface Mountain, Triunfo Canyon and the area around the Las Virgenes Reservoir would be studied for inclusion in the national recreation area as a moderate intensity area. Studies would be conducted to determine the exact configuration of these boundary adjustments.

Simi Hills would be managed as a historic ranching landscape with Morrison Ranch house and the surrounding cultural landscape restored.

An interpretive site would be established at or near Burro Flats to interpret America's role in space that began with the Chumash astronomers.

High Intensity

Approximately 5 percent of the park would be designated high intensity. Most high intensity areas would be located on the perimeter of the parkland and in areas that are already high intensity areas such as the beaches. Some of these areas would allow overnight use. The development of the following park facilities would occur:

- ***Mugu Lagoon Visitor Education Center*** – would be located at the western-most end of the park off PCH. This facility would emphasize use of sustainable energy and materials through a working education demonstration. Mugu Lagoon, managed by the U.S. Navy, is the largest coastal wetland in California outside the San Francisco Bay area. The NPS would play a greater role in administering the lagoon in cooperation with the U.S. Navy. This facility would provide an important interpretation point for the estuarine ecosystem. The proposed site for the education center would be located in an already disturbed area off PCH. A boardwalk around the lagoon would allow visitors an opportunity to experience the lagoon system. This location allows beautiful views of the coast, an unspoiled view of the mountains, and a panorama of the lagoon.
- ***Circle X Ranch*** – would become an overnight environmental education camp with expanded facilities for group camping. Existing facilities would be rehabilitated, expanded, improved or replaced. Sustainable and compatible architectural and design themes would be established and sensitive resources would be protected in the siting of any new structures.
- ***Decker Canyon*** – would become an accessible overnight and day use environmental education center and camp for all ages and abilities.
- ***Peter Strauss Ranch*** – would host small art exhibits, concerts, fund-raisers and family events. The facility would become a focal point for cultural and fine arts education in the park. Circulation and parking improvements would be necessary.
- ***Paramount Ranch*** – would include facilities for a film history education center. Parking and circulation would be improved to accommodate visitation while protecting the cultural landscape.
- ***The barn at Rancho Sierra Vista*** – would be adaptively reused as an environmental education center.

MANAGEMENT AREAS:

LOW INTENSITY AREA

Emphasis would be on natural and cultural resource preservation and a sense of being immersed in a natural and wild landscape away from the comforts and conveniences of "civilization." The sights and sounds of nature in this area would be more prevalent than that of humans. There would be no overnight uses. Hiking, biking, and horseback riding would only be on designated trails.

MODERATE INTENSITY AREA

Emphasis would be predominantly on the natural environment, but there would also be a sense of being near the familiarity, comforts, and convenience of "civilization." Facility development would harmonize with the natural setting and be based on the principles of sustainable development as described under the parkwide goals. Hiking, biking, and horseback riding on designated trails, low-impact camping, and self-guided and guided interpretive walks would be acceptable activities. Moderate use areas would act as an insulating buffer around urban development.

HIGH INTENSITY AREA

Emphasis would be on facility development that harmonizes with natural and cultural settings. There would be a sense of being surrounded by the scenic landscape and cultural resources of a unit of the national park system. The sights and sounds of people and development within and outside the area would be readily apparent. There would be frequent encounters with vehicles, other types of visitors , and park staff. Activities would include hiking, biking and horseback riding on designated trails, self-guided trails, visitor orientation, camping, educational activities and study programs, picnicking, interpretive walks, events and festivals, day camps, and community activities.

SCENIC CORRIDOR

Emphasis would be on roads through scenic landscapes and cultural resources of the park. People would experience the park by driving on scenic roads. During some seasons, days, and times of day there would be extensive interaction with other vehicles. Surrounding new development would harmonize with the scenic quality of the landscapes and be based on the principles of sustainable development. Environmental impacts from road development, management, and visitor use would be mitigated. Activities such as picnicking; self-guided tours; viewing the park by car, motorcycle, or bus, bikes, and hiking along segregated trails or lanes would be encouraged.

COMMUNITY LANDSCAPE

Emphasis would be on private development that has unique character, architecture, or landscape and that deserves special recognition. However, the designation does not suggest any type of management other than technical assistance.

1. MUGU LAGOON VISITOR EDUCATION CENTER
2. RANCHO SIERRA VISTA BARN TO BE ENVIRONMENTAL EDUCATION CENTER
3. CIRCLE X OVERNIGHT EDUCATION CAMP
4. DECKER CANYON ACCESSIBLE OVERNIGHT ENVIRONMENTAL EDUCATION CENTER
5. PETER STRAUSS RANCH EVENT AREA
6. INTERPRETIVE SITE ON OR NEAR BURRO FLATS
7. PARAMOUNT RANCH FILM HISTORY EDUCATION CENTER
8. CORRAL CANYON OVERNIGHT EDUCATION CAMP
9. WHITE OAK FARM INTERPRETIVE EXHIBITS
10. MORRISON RANCH HOUSE CULTURAL LANDSCAPE WOULD BE RESTORED
11. GILLETTE RANCH JOINT ADMINISTRATION AND ENVIRONMENTAL EDUCATION CENTER
12. NORTHERN GATEWAY VISITOR CENTER, PARK AND RIDE, & LARGE SCREEN THEATER
13. LOS VIRGENES ENVIRONMENTAL LEARNING CENTER (BY OTHERS)
14. MALIBU BLUFFS VISITOR EDUCATION CENTER
15. 415 PCH SANTA MONICA / PACIFIC COAST HIGHWAY VISITOR INFORMATION SITE
16. EXPAND BOUNDARY TO INCLUDE GRIFFITH PARK - LOCATE VISITOR CONTACT AREA IN EXISTING FACILITY AND INCLUDE STONE CANYON RESERVOIR

EDUCATION ALTERNATIVE

EMPHASIS WOULD BE ON PRESERVING ALL NATURAL SYSTEMS AND DEVELOPING STRONG EDUCATIONAL PROGRAMS THAT REACH THE PUBLIC, ESPECIALLY THE SCHOOL SYSTEMS.

THE ECOSYSTEM IS SUFFICIENTLY RARE TO WARRANT ITS PRESERVATION AS A NATURAL RESERVE. MOST PARK-RELATED DEVELOPMENT AND USES WOULD BE REMOVED, AND TRAILS WOULD BE RETAINED. IN SENSITIVE AREAS, REROUTED, AND EXPANDED ALONG THE BACKBONE TRAIL. SOME FIRE ROADS MIGHT BE ELIMINATED. PARKING WOULD BE "LOW IMPACT" WHEREVER POSSIBLE IN FAVOR OF PRESERVING AND ENHANCING NATURAL PROCESSES. THE MEDITERRANEAN ECOSYSTEM COULD IMPROVE IN CONDITION AND FLOURISH INTO THE FUTURE. MOST PEOPLE COULD LEARN TO UNDERSTAND AND VALUE THIS ECOSYSTEM THROUGH INTERACTIVE INTERPRETIVE PROGRAMS USING CUTTING-EDGE TECHNOLOGY.

APPROXIMATELY 75% OF AREA WOULD BE DESIGNATED "LOW INTENSITY." THEREFORE, VISITOR ACCESS TO SENSITIVE RESOURCES WOULD NOT BE FACILITATED OR ENCOURAGED. MODERATE USE AREAS WOULD ACT AS A BUFFER FOR THE PRESERVATION AREA.

Figure 8:

EDUCATION ALTERNATIVE

SANTA MONICA MOUNTAINS NATIONAL RECREATION AREA CALIFORNIA

INCLUDES UNITS OF NPS, CALIFORNIA STATE PARKS, AND THE SANTA MONICA MOUNTAINS CONSERVANCY

United States Department of the Interior • National Park Service
DSC • February 2002 • 638 • 20062b

- ***In the vicinity of Highway 101 and Las Virgenes/Malibu Canyon Road,*** – a Northern Gateway visitor center with a large screen theater would provide education and orientation for visitors along the 101 corridor. The theater would give an overview of the park with an emphasis on the importance of preserving the incredible variety of ecosystems in the park and its surroundings. State-of-art technology would be used to give a greater understanding of the park's resources and the importance of stewardship. The film community of the Los Angeles area would be a fertile resource for new and experimental means to explore the use of technology and experiencing the park.
- ***White Oak Farm*** – located near the intersection of Mulholland Highway and Las Virgenes Canyon Road would offer interpretive and educational programs and exhibits interpreting early ranching in southern California.
- ***A jointly operated administration and environmental education center*** – would be located at the Gillette Ranch site near the intersection of Mulholland Highway and Las Virgenes Canyon Road. The National Park Service and California State Parks would house operations and management functions at this location. The interpretive center would include programs of the interrelated ongoing geological processes, soil composition, and plant communities of the area. Existing buildings would be adapted for classroom use. An environmental education curriculum would be offered for all levels.
- ***A visitor education center*** – would be located at Malibu Bluffs. This facility would be jointly operated by the NPS and CSP and would provide a general SMMNRA orientation and staging site for visitors to Malibu Lagoon, Malibu Pier, and the Adamson House.
- ***An overnight environmental education camp*** – would be established at Corral Canyon to supplement the environmental education day camp in Solstice Canyon for school groups from the Los Angeles area.
- ***415 PCH (Marion Davies Home)*** – located near the Santa Monica Pier, would be rehabilitated and provide an eastern gateway to the national recreation area and provide visitor orientation to the park. Exhibits would interpret the evolution of the southern California coastal culture, the history of PCH and the terminus of Historic Route 66. Congress recently passed legislation to preserve the cultural resources of the Route 66 corridor.
- ***The William O. Douglas Outdoor Center*** – located at Franklin Canyon would offer an expanded educational day camp program for Los Angeles County schools.
- ***Expanding the boundary to include Griffith Park and locating a visitor contact area within an existing facility*** – would bring park presence closer to the city and provide orientation and a staging area for transportation to the park.

Scenic Corridor Areas

Scenic corridors would be designated for Mulholland Drive, Topanga Canyon Boulevard, PCH, Malibu Canyon Road, Kanan-Dume Road, and Decker Canyon Road. These roadways are significant for their visual quality and historical, environmental, and recreational sites. Waysides and audio tours would be developed focusing on the significant features of the park as well as the natural and cultural history. Part of this route (Malibu Canyon Road from Malibu Bluffs to Mulholland, Mulholland to Sequit Point and back to Malibu Bluffs) would comprise a scenic loop with several destination points, which would be an opportunity for an interpretive tour operated by a concession.

A tourist shuttle could transport the visitor through the entire length of Mulholland Highway, starting with Coldwater Canyon and Franklin Canyon in the east and ending at Sequit Point in the southwest. Possibilities for automatic gates would facilitate travel for shuttle routes through the unpaved areas, while keeping the casual motorist out of restricted areas.

The establishment of agreements and design review boards would ensure that proposed developments are evaluated and found to be consistent with the scenic values of the corridors.

SUMMARY OF MITIGATION MEASURES

The following is a summary of additional mitigation measures specific to the education alternative:

Water Resources

Restroom facilities would be planned to eliminate the delivery of pathogens to groundwater or surface water. Qualified geologists would conduct a soils and engineering evaluation to support the location and design of all septic system repairs, upgrades and installations.

If on-site surface or groundwater would be used as a potable water source for new camp facilities, the participating agencies would study sources of drinking water for camps to avoid the over-extraction.

Biological Resources and Wetlands

Best management practices would be implemented during construction. For example, if construction would occur during the rainy season, temporary sedimentation retention basins could be required on some projects. In addition, servicing of construction vehicles could be prohibited within 100 feet of riparian corridors, or disturbances of native vegetation or the root zones of oak trees could be avoided by staking construction staging areas. Visitor management and visitor education programs would be developed for each project.

Fire clearance zones would be incorporated into the planning of developments.

Educational efforts, such as posting fire hazard signs and focusing on fire hazards in educational programs, would be implemented.

If vegetation is lost or disturbed from any activity, the area would be rehabilitated or revegetated with species from an appropriate native plant palette.

Sensitive habitats and habitat linkage areas would be avoided through careful project siting.

Habitat connectivity would be maintained through the maintenance of sufficiently wide (greater than 400 feet) habitat linkages between major blocks of habitat.

The feasibility of retrofitting wildlife underpasses where primary roads intersect with wildlife movement areas within the recreation area would be considered in future NEPA/CEQA documentation prepared for projects that might affect habitat linkages within their sphere of influence.

Cultural Resources

A monitoring program that would assess the rate and nature of impacts to cultural resources in the vicinity of trails and other high intensity use areas would be established. This program would focus on a subset of resources, and the results extrapolated to similar settings. Should monitoring reveal the acceleration or degradation of cultural resources to an unacceptable level, mitigation measures would be developed in consultation with recreational groups, the SHPO, and

concerned Native American Indian groups. Such measures would include avoidance, data recovery, access restriction, signs, visitor education, and similar actions.

A cultural resources inventory, evaluation, and assessment program conducted by a qualified archeologist, historical landscape architect, or landscape historian would precede all trail construction. If any resources were identified, such mitigation measures, as avoidance or data recovery, would be conducted. Native American Indian groups, NPS subject matter experts, the SHPO and interested individuals and groups would be consulted regarding appropriate mitigation of potential impacts to cultural landscapes and places of traditional or sacred significance. To the extent possible, the trail would be constructed to avoid or minimize impacts to the traditional values of such places. A cultural resources inventory, evaluation, and assessment program conducted by a qualified archeologist would precede all grading and construction. If resources are identified, such mitigation measures, as avoidance or data recovery would be conducted.

In accordance with Section 106 of the National Historic Preservation Act, the participating agencies would consult with the SHPO and interested Native American communities prior to the implementation of any of the proposed actions (e.g., new facilities, facility enhancements, campgrounds, etc.) that might affect cultural resources. The participating agencies would consult with concerned Native American Indian groups to assist in developing measures to ensure that this program is developed in a manner consistent with respect for Native American Indian beliefs, traditions, and other cultural values. A qualified archeologist would conduct a program of inventory, evaluation, and impact assessment prior to any ground disturbing activities affecting archeological resources. If resources were identified, mitigation of impacts through avoidance, data recovery, access restriction, and visitor education would be conducted.

Compliance with Section 106 of the NEPA and CEQA would be required for all construction activities that alter the historic characteristics of any property. Specifically, an inventory, evaluation, and impact assessment program would be carried out by a qualified archeologist, followed by mitigation if necessary. Mitigation measures would include avoidance, data recovery through HABS/HAER documentation, reconstruction using historic materials, or similar measures in accordance with the *Secretary of the Interior's Standards for the Treatment of Historic Properties* (1995).

To assist with visitor education, the Mugu Lagoon Visitor Education Center would include information on traditional lifeways and the significance of the settlement of *Muwu* to the cultural history of the area.

Visitor Experience

Improve existing trails, and create new trails and adequate camping areas in moderate intensity use areas.

Private recreation service providers would be encouraged to meet growing demand for recreational services and facilities.

Recreation Alternative

CONCEPT

The emphasis of this concept would be on maximizing recreation with new park development concentrated in areas that are not environmentally sensitive, or areas that have already been disturbed. A broader

dispersion of outdoor recreational facilities would be provided without jeopardizing the long-term preservation of the natural and cultural communities. Approximately 65 percent of the park would be open to multi-use trails and more designated camping areas would be created. Existing facilities would be improved and/or expanded. Existing wilderness areas would remain in that status. Boundary expansion would be limited to the areas listed in "Actions Common to all Alternatives." Figure 9 illustrates the management areas and facilities proposed under the recreation alternative.

MANAGEMENT AREAS

Low Intensity Areas

Twenty-five percent of the highly sensitive areas in the SMMNRA would be designated low intensity. Facilities would be maintained in a relatively primitive manner to preserve the visitor experience. Those areas already in wilderness status would remain so.

Moderate Intensity Areas

Approximately 65 percent of the park would be designated moderate intensity. All trails would be multi-use trails and the area available for overnight use would be limited to designated camping areas. Sycamore Canyon would be a multi-use recreation corridor. A bypass would be needed around the preserve to accommodate mountain bikes. The Backbone Trail would be completed with eight additional designated trail camps in appropriate areas to accommodate a multi-day recreation experience as suggested in the SMMART report.

High Intensity Areas

Approximately 10 percent of the park would be designated high intensity use. Existing facilities would be improved/expanded. Some existing facilities would be expanded with any new development occurring only in already disturbed areas, as described below:

- ***Mugu Lagoon Visitor Education Center*** – would be located at the western-most end of the park off Pacific Coast Highway (PCH). This facility would emphasize use of sustainable energy and materials through a working education demonstration. Mugu Lagoon, managed by the U.S. Navy, is the largest coastal wetland in California outside the San Francisco Bay area. This facility would provide an important interpretation point for the estuarine ecosystem. The proposed site for the education center would be located in an already disturbed area off PCH. A boardwalk around the lagoon would allow visitors an opportunity to experience the lagoon system. This location allows beautiful views of the coast, an unspoiled view of the mountains, and a panorama of the lagoon.
- ***Expanded facilities located at Circle X Ranch*** – would offer additional overnight accommodations for groups. The facilities would also offer improved access to backcountry recreation trails, including the Backbone Trail.
- ***Decker Canyon*** – would become an accessible overnight and day use environmental education center and camp for all ages and abilities.
- ***Peter Strauss Ranch*** – would host small art exhibits, concerts, fund-raisers, and family events. The facility would be enhanced and would become a focal point for cultural and fine arts education in the park. Circulation and parking improvements would be necessary.
- ***Paramount Ranch*** – would include improved visitor facilities, a film history museum and opportunities to watch live motion picture productions.

MANAGEMENT AREAS:

LOW INTENSITY AREA

Emphasis would be on natural and cultural resource preservation and a sense of being immersed in a natural and wild landscape away from the comforts and conveniences of "civilization." The sights and sounds of nature in this area would be more prevalent than that of humans. There would be no overnight uses. Hiking, biking, and horseback riding would only be on designated trails.

MODERATE INTENSITY AREA

Emphasis would be predominantly on the natural environment, but there would also be a sense of being near the familiarity, comforts, and convenience of "civilization." Facility development would harmonize with the natural setting and be based on the principles of sustainable development as described under the parkwide goals. Hiking, biking, and horseback riding on designated trails, low-impact camping, and self-guided and guided interpretive walks would be acceptable activities. Moderate use areas would act as an insulating buffer around urban development.

HIGH INTENSITY AREA

Emphasis would be on facility development that harmonizes with natural and cultural settings. There would be a sense of being surrounded by the scenic landscape and cultural resources of a unit of the national park system. The sights and sounds of people and development within and outside the area would be readily apparent. There would be frequent encounters with vehicles, other types of visitors , and park staff. Activities would include hiking, biking and horseback riding on designated trails, self-guided trails, visitor orientation, camping, educational activities and study programs, picnicking, interpretive walks, events and festivals, day camps, and community activities.

SCENIC CORRIDOR

Emphasis would be on roads through scenic landscapes and cultural resources of the park. People would experience the park by driving on scenic roads. During some seasons, days, and times of day there would be extensive interaction with other vehicles. Surrounding new development would harmonize with the scenic quality of the landscapes and be based on the principles of sustainable development. Environmental impacts from road development, management, and visitor use would be mitigated. Activities such as picnicking; self-guided tours; viewing the park by car, motorcycle, or bus, bikes, and hiking along segregated trails or lanes would be encouraged.

COMMUNITY LANDSCAPE

Emphasis would be on private development that has unique character, architecture, or landscape and that deserves special recognition. However, the designation does not suggest any type of management other than technical assistance.

1. MUGU LAGOON VISITOR EDUCATION CENTER.
2. RANCHO SIERRA VISTA STAGING FACILITIES EXPANDED
3. CIRCLE X CAMP (EXPANDED FACILITY)
4. DECKER CANYON ACCESSIBLE OVERNIGHT ENVIRONMENTAL EDUCATION CENTER.
5. PETER STRAUSS RANCH FACILITIES WOULD BE EXPANDED
6. BACKBONE TRAIL WOULD BE COMPLETED WITH 6 CAMPSITES
7. PARAMOUNT RANCH FILM HISTORY MUSEUM
8. MORRISON RANCH HOUSE AND CULTURAL LANDSCAPE TO BE RESTORED
9. WHITE OAK FARM INTERPRETIVE EXHIBITS
10. NORTHERN GATEWAY VISITOR CENTER.
11. MALIBU BLUFFS VISITOR EDUCATION CENTER.
12. SCENIC COASTAL TOUR.
13. VISITOR CONTACT AT SANTA MONICA PIER.
14. EXPOSITION PARK VISITOR INFORMATION CENTER.
15. VISITOR INFORMATION SITE WOULD BE LOCATED AT GRIFFITH PARK.

RECREATION VISION

EMPHASIS WOULD BE ON MAXIMIZING RECREATION WITH NEW PARK DEVELOPMENT CONCENTRATED IN AREAS THAT ARE NOT ENVIRONMENTALLY SENSITIVE.

A HIGH LEVEL OF DISPERSED OUTDOOR RECREATIONAL FACILITIES AND USE WOULD BE PROVIDED WITHOUT JEOPARDIZING THE LONG-TERM PRESERVATION OF THE NATURAL COMMUNITIES. SUCH FACILITIES AND USES WOULD BE NEEDED TO MAKE THE AREA ACCESSIBLE AND MEANINGFUL TO NATIONAL/INTERNATIONAL VISITORS AND LOCAL RESIDENTS.

HIGHLY SENSITIVE AREAS (APPROXIMATELY 25% OF THE RECREATION AREA) WOULD BE DESIGNATED 'LOW INTENSITY.' MOST OF THE AREA WOULD BE DESIGNATED 'MODERATE INTENSITY'. WITH SOME MODIFICATION, THE NATURAL AND CULTURAL RESOURCES MODIFIED TO PROVIDE ESSENTIAL SERVICES AND FACILITIES.

Figure 9:

RECREATION ALTERNATIVE

SANTA MONICA MOUNTAINS NATIONAL RECREATION AREA CALIFORNIA

INCLUDES UNITS OF NPS, CALIFORNIA STATE PARKS, AND THE SANTA MONICA MOUNTAINS CONSERVANCY

United States Department of the Interior • National Park Service
DSC • February 2002 • 638 • 20064c

- ***The barn at Rancho Sierra Vista*** – would be adaptively used as an environmental education center, and staging facilities would be expanded.
- ***White Oak Farm*** – located near the intersection of Mulholland Highway and Las Virgenes Canyon Road would offer education and interpretive exhibits interpreting early ranching in southern California.
- ***A visitor center located in the vicinity of the intersection of Highway 101 and Las Virgenes/Malibu Canyon Road*** – would serve as a northern gateway to the park and would provide visitor orientation and resource interpretation.
- ***A visitor education center would be located at Malibu Bluffs.*** – This location would serve as a staging area and orientation for park facilities such as the Adamson House, Malibu Lagoon and Malibu Pier. This site is centrally located and very visible from PCH.
- ***The William O. Douglas Outdoor Center*** – located at Franklin Canyon would offer an expanded educational day camp program for Los Angeles County schools.
- ***Expanding the boundary to include Griffith Park and locating a visitor contact area within an existing facility*** – would bring park presence closer to the city and provide orientation and a staging area for transportation to the park.
- ***Morrison Ranch House and cultural landscape*** – would be restored.
- ***A scenic coastal boat tour run by concession*** – would offer visitors a unique view of the coastline and mountain scenery. Docking points would be located at the Santa Monica Pier and Malibu Pier.
- ***A visitor contact station and National Park Learning Center*** – would be located at Exposition Park would provide visitor orientation at the eastern end of the park and provide a general introduction to the National Park system.
- ***Santa Monica Pier*** – would be a visitor contact station at the Santa Monica Pier.

Scenic Corridor Areas

Pacific Coast Highway, Mulholland Drive, Topanga Canyon Boulevard, Malibu Canyon Road and Kanan Dume Road would be designated scenic corridors.

A shuttle service could allow hikers to experience as much of the park as possible by picking them up at the end of their journey so they would not have to return to their starting point. The enormous size of the SMMNRA would benefit from a loop service that stopped at relatively few stations, with some route deviation capabilities. Should Calabasas and Agoura Hills continue to run shuttles to Zuma Beach in the future, efforts could be made to encourage operations that include one or two SMMNRA trailheads as well, and connect the service to a future park and ride facility.

The establishment of agreements and design review boards would ensure that proposed developments are evaluated and found to be consistent with the scenic values of the corridors.

SUMMARY OF MITIGATION MEASURES

The following is a summary of additional mitigation measures specific to the recreation alternative:

Water Resources

Restroom facilities would be planned to eliminate the delivery of pathogens to groundwater or surface water. A qualified engineer would conduct a soils and engineering evaluation to support the

location and design of all septic system repairs, upgrades and installations.

If on-site surface or groundwater would be used as a potable water source for new camp facilities, the participating agencies would study sources of drinking water for camps to avoid the over-extraction of water.

Biological Resources and Wetlands

Best management practices would be implemented during construction. For example, if construction would occur during the rainy season, temporary sedimentation retention basins could be required on some projects. In addition, servicing of construction vehicles could be prohibited within 100 feet of riparian corridors, or disturbances of native vegetation or the root zones of oak trees could be avoided by staking construction staging areas. Such measures, and others as appropriate, would ensure that impacts on biological resources due to construction would be minimized.

Fire clearance zones would be incorporated into the planning of developments.

Educational efforts would be implemented, such as posting fire hazard signs and providing hikers brochures at trail entry points.

If vegetation is lost or disturbed from visitor activities, the area would be rehabilitated or revegetated with species from an appropriate native plant palette and seeds/plants would be obtained from local sources.

Sensitive habitats and habitat linkage areas would be avoided through careful project siting.

Degraded habitats within conserved linkage areas would be restored.

Habitat connectivity would be maintained through the maintenance of sufficiently wide (greater then 400 feet) habitat linkages between major blocks of habitat.

The feasibility of retrofitting wildlife underpasses where primary roads intersect with wildlife movement areas within the recreation area would be considered in the NEPA/CEQA documentation prepared for projects that might affect habitat linkages within their sphere of influence.

Cultural Resources

All construction or revegetation projects involving ground disturbance would be preceded by a cultural resource inventory, evaluation, and impact assessment program conducted by a qualified cultural resources specialist. If necessary, mitigation measures, including avoidance or data recovery, would be developed and implemented.

A monitoring program that would assess the rate and nature of impacts to cultural resources in the vicinity of trails and other high intensity use areas would be established. This program would focus on a subset of resources, and the results extrapolated to similar settings. Should monitoring reveal the acceleration or degradation of cultural resources to an unacceptable level, mitigation measures would be developed in consultation with recreational groups, the SHPO, and concerned Native American Indian groups. Such measures would include avoidance, data recovery, access restriction, signs, visitor education, and similar actions.

The administering agencies would consult with the SHPO and the ACHP prior to the implementation of any of the proposed component actions. Because multiple uses have the potential to accelerate degradation of cultural resources on all trails, all trails would be subject to cultural resources investigations by qualified archeologists, including inventory, evaluation, and impact assessment. Mitigation measures, including avoidance, data recovery, access restrictions, and visitor education, would be developed for those resources that could be expected to be impacted by component actions.

A cultural resources inventory, including subsurface exploration, would be completed prior to the finalization of plans associated

with the Mugu Lagoon Center, to assess the potential to adversely impact archeological deposits in this area. If necessary, resources are identified, mitigation through avoidance or data recovery would be undertaken. Monitoring by a qualified archeologist and a Native American Indian would accompany any ground-disturbing activities. In the event that any unanticipated resources are encountered, all construction in the vicinity would be halted until the significance of the find is evaluated and an appropriate course of action defined. To assist with visitor education, the education center would include information on traditional lifeways and the significance of the settlement of *Muwu* to the cultural history of the area.

Compliance with Section 106 of the NHPA and CEQA would be required for all construction activities that alter the historic characteristics of the Paramount Ranch and White Oak Farm. Specifically, an inventory, evaluation, and impact assessment program would be carried out by a qualified archeologist, followed by mitigation if necessary. Mitigation measures could include avoidance, data recovery through HABS/HAER documentation, reconstruction using historically materials, or similar measures, in accordance with the *Secretary of the Interior's Standards for the Treatment of Historic Properties* (1995).

Prior to any ground-disturbing activities, the Malibu Bluffs visitor center site would be subject to a cultural resources investigation, including inventory, evaluation, and impact assessment by a qualified archeologist. Mitigation measures, including avoidance, data recovery, access restriction, and visitor education, would be developed for those resources that could be expected to be impacted by this component action. Monitoring by a qualified archeologist and a Native American Indian representative would accompany any ground disturbing construction. If any unanticipated materials are discovered, all ground-disturbing activities in the area would cease until the significance of the find could be determined and an appropriate course of action approved. Such action could include avoidance, preservation in place, or data recovery.

All road improvements would be preceded by a cultural resource investigation by a qualified archeologist, historical landscape architect, or landscape historian inclusive of inventory, evaluation, and impact assessment, followed by mitigation, if necessary. Such measures would include avoidance or data recovery. The documentation that would accompany designation would provide information that could be integrated into the management of this resource. Through the assessments and consultations that would attend such a designation, additional mechanisms, incentives, and opportunities to protect the resource from indirect impacts could be provided to reduce or eliminate these impacts. Such measures could include traffic volume control, parking control, and expanded transit options.

Visitor Experience

Improve existing trails, and create new trails and adequate camping areas in moderate intensity use areas.

Private recreation service providers would be encouraged to meet growing demand for recreational services and facilities.

Land Use and Socioeconomic Environment

Transportation

It may be desirable at some proposed visitor use sites to provide a designated left turn lane on the adjacent roadways, when necessary, to minimize traffic conflicts and make site access easier.

Summary of Alternatives

Table 8 provides a summary of the resource management character, visitor experience, facility development, management activities, and transportation conditions for each of the five proposed alternatives.

Summary of Environmental Consequences

Table 9, in this chapter, provides a comparative summary of the key environmental consequences and mitigation measures for each of the five proposed alternatives. In addition to Table 9 and the summaries of specific mitigation measures at the end of each alternative in this chapter, the mitigation measures are described throughout the chapter Environmental Consequences.

Strategies Considered but Eliminated from Further Study

In September of 1997, a newsletter was distributed to the public requesting visions for the future of the park. Many of the comments received focused on public use, natural resources and the protection of the park. The majority of comments reflected a balanced strategy with more emphasis on preserving natural resources. However, some ideas were noteworthy but for various reasons could not be included in the alternatives.

- ***Change the "National Recreation Area" designation to "National Park" status.*** – Although the size and resource significance of the Santa Monica Mountains National Recreation Area equals or exceeds those of some NPS units bearing the formal designation national park, the recreation area's current state suggests such a question is better left to a later time. The argument for this notion is based on the fact that land remains to be acquired, resource strategies are yet to be implemented, and facilities need to be completed. It should be further noted that such designations are ultimately the decision of Congress and occur as the result of law. General management plans do not ordinarily propose this sort of congressional action.
- ***Limit the amount of development within park boundaries.*** – This general management plan and environmental impact statement would seek to limit the development of park facilities, in that it hopes to avoid duplication among park agencies and provide only those facilities needed to permit public enjoyment consistent with the protection of park resources. But, to the extent that this suggestion would seek to limit private development, such action would be contrary to the cooperative nature of the park intended by Congress when established in 1978. When all parklands are protected, as envisioned in the national recreation area's land protection plan, one-third of the park would remain in private ownership.
- ***Convert Malibu Canyon Road to a toll road and reduce speed limit to 30 miles per hour.*** – This proposal speaks to the concern that the park character of some key roads is dramatically affected by commuter traffic. Limitations on any given road, however, would be likely to build pressure for roads elsewhere in the park, with equally unsatisfactory results. Though a problem that deserves attention, immediate solutions lie well beyond the scope and resources of this planning effort.
- ***Buy all the vacant land within and adjacent to the park boundary.*** – As noted previously, this suggestion would fall outside the legislative

intent of Congress for the recreation area and capacity for appropriations.

- ***Prohibit mountain biking in the park.*** – None of the park agencies participating in the development of this plan believe that prohibiting mountain biking would be feasible or desirable. That is not to say that mountain bikes are an appropriate use in all areas, but a complete prohibition of their use would be equally unwarranted and ignores the interests of a large component of park users.
- ***Open fire roads to motorcycle use.*** – Motorcycles on fire roads in the park would be contrary to the applicable law and policy for each of the park agencies. The roads provide access to otherwise undeveloped areas of the park where inappropriate motorcycle use, however rare, could have devastating adverse impacts. Moreover, the fire roads are not maintained nor provided for the purpose of motorcycle use. Serious questions would be raised about potential safety and liability.
- ***Redraw park boundary to follow physical and ecological lines rather than political lines. Have the park encompass complete natural systems.*** – The Santa Monica Mountains Zone affords the National Park Service the ability to cooperate with other resource agencies beyond park boundaries in an effort to restore and maintain natural systems. The Santa Monica Mountains Conservancy has an even broader reach in its legislative mandate. Little would be gained by any significant attempt to revise the recreation area's boundary along physical or ecological lines. In large part, such lines have already been obscured by development in adjacent areas. Different natural systems can overlay one another but have very different boundaries, leaving a large question as to which boundary should be applied. With that explanation, readers should consider that some alternatives do propose boundary adjustments in certain areas, in an effort to better correspond to natural systems. A clear example of this is the preferred alternative's proposed expansion of the wildlife corridor in the area of Liberty Canyon.
- ***Provide shuttle systems to and from trailheads from visitor center.*** – Present patterns of use, which concentrate use on weekends and certain hours of the day, cannot support the cost of a dedicated shuttle system. The preferred alternative, however, does propose the support and accommodation of local systems at certain trailheads and visitor centers. This would result in a similar outcome, albeit on a more limited scale. Use patterns at some point might warrant a future plan's consideration of this kind of shuttle system.

Environmentally Preferred Alternative

The environmentally preferred alternative is determined by applying the criteria suggested in the National Environmental Policy Act of 1969 (NEPA), which is guided by the Council on Environmental Quality (CEQ). The CEQ provides direction that "[t]he environmentally preferable alternative is the alternative that will promote the national environmental policy as expressed in NEPA's Section 101:(1) fulfill the responsibilities of each generation as trustee of the environment for succeeding generations; (2) assure for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings; (3) attain the widest range of beneficial uses of the environment without degradations, risk to health or safety, or other undesirable and unintended consequences; (4) preserve important historic, cultural, and natural

aspects of our national heritage, and maintain, wherever possible, an environment which supports diversity, and variety of individual choice; (5) achieve a balance between population and resource use which will permit high standards of living and a wide sharing of life's amenities; and (6) enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources."

After careful review of potential resource and visitor impacts, the preferred alternative would be the environmentally preferred alternative because each of the provisions of the national environmental policy goals stated in NEPA Section 101 would be achieved at a relatively high level. This alternative would achieve the provisions by providing a balance of increased protection of natural and cultural resources while providing compatible recreation and education opportunities for a diverse public, furthering provision 5 of NEPA Section 101. The preferred alternative would increase protection of wildlife corridors, watershed/marine interface zones, and cultural landscapes, conduct boundary studies, and designate 80 percent of SMMNRA federal lands under the low intensity management prescription. Such actions would further provisions 1, 2, 4, and 6 of NEPA section 101 through increased resource protection.

In addition, the preferred alternative would develop additional visitor contact and interpretive facilities beyond those in the no action alternative, encourage resource-compatible recreation, and reduce user conflicts on trails by allowing multi-use on designated trails only. These and other actions enhancing recreational opportunities and visitor experience would more fully achieve provisions 3, 4, and 5. Although other alternatives would achieve greater levels of individual protection for natural and cultural resources (preservation alternative), better enhance visitor experience and recreational opportunities (recreation alternative), or increase educational programs and facilities (education alternative), the preferred alternative surpasses the other alternatives in best realizing the full range of national environmental policy goals as stated in section 101 of the National Environmental Policy Act.

The no action alternative represents the current management direction for SMMNRA. Park managers would continue to provide for visitor use and resource protection consistent with legal requirements, current NPS policy, and existing planning guidance. Consequently, the no action alternative would continue to meet the full range of national environmental quality goals presented above, but on a relatively basic level. Protection of cultural and natural resources, as articulated under provisions 1, 2, 4, and 6 of NEPA Section 101, would be less intense than with the preferred or preservation alternatives, where initiatives such as identification and protection of wildlife corridors would be implemented. The no action alternative would not attain the widest range of beneficial uses (provision 3), support a variety of individual choice (provision 4), nor achieve a balance between population and resource use (provision 5) as fully as would the preferred, preservation, education, or recreation alternatives through development of additional interpretive facilities and improved education and interpretation. Overall, the no action alternative would not achieve the provisions of the goals of NEPA Section 101 as completely as the action alternatives, because of beneficial impacts that are not realized and existing adverse impacts that are not remedied.

The preservation alternative emphasizes the protection of natural and cultural resources relative to visitor experience or

education. As with the preferred alternative, 80 percent of the SMMNRA NPS lands would be designated under the low intensity management prescription, thereby providing protection to resources from development in the majority of the park. Park-related development and trails would be removed in some sensitive resource areas, some fire roads would be removed, and boundary studies would be performed. As a result, provisions 1, 2, 4, and 6 would be achieved at a high level under this alternative. However, the least amount of facility development would occur relative to the other action alternatives, resulting in fewer interpretive and visitor contact facilities to benefit visitor experience and understanding. Consequently, provisions 3 and 5 would not be fully achieved under the preservation alternative relative to the preferred alternative.

The education alternative would emphasize developing strong educational programs, targeting school systems and the general public. Facilities development under this alternative would provide for or enhance educational opportunities. The19 proposed facilities are the most of any alternative. Provisions 3 and 5 would be realized at a relatively high level. Although the same proportion of lands would be managed under the low intensity management prescription as with the preferred and preservation alternatives, resource protection, as articulated under provisions 1, 2, 4, and 6, would not be achieved to the same level as these two alternatives. The education alternative would not include a number of resource preservation initiatives included under these alternatives, including protection and restoration of watershed/marine interface zones and wildlife corridors. In addition, the relatively large number of facilities proposed would result in increased resource impacts in these locations.

The recreation alternative would maximize recreational opportunities and enhance experiences, providing for a wide range of beneficial uses and a variety of individual choice. The majority of NPS lands (65 percent) would be managed under the moderate intensity management prescription. As a result, provisions 3 and 5 would be achieved at a high level. However, only 25 percent of SMMNRA NPS lands would be managed under the low intensity management prescription, the least of any alternative, and new initiatives for protecting resources are limited. Consequently, provisions 1, 2, 4, and 6 would be achieved at a lesser level than in the preferred or preservation alternatives.

SUMMARY OF ALTERNATIVES

	ACTIONS COMMON TO ALL ALTERNATIVES	NO ACTION ALTERNATIVE	PREFERRED ALTERNATIVE	PRESERVATION ALTERNATIVE	EDUCATION ALTERNATIVE	RECREATION ALTERNATIVE
		Low Intensity – (30%) Moderate Intensity – (60%) High Intensity – (10%)	Low Intensity – (80%) Moderate Intensity – (15%) High Intensity – (5%)	Low Intensity – (80%) Moderate Intensity – (15%) High Intensity – (5%)	Low Intensity – (80%) Moderate Intensity – (15%) High Intensity – (5%)	Low Intensity – (25%) Moderate Intensity – (65%) High Intensity – (10%)
Resource Management Character and Condition	• Watersheds and coastal resources would be protected and preserved through watershed management practices. Estuaries and lagoons would be restored to their natural state. • Sensitive historic and ethnographic resources would be protected and preserved. • Alien plant species would be eradicated, where appropriate, and habitat for animal and plant populations would be maintained and restored. • Steelhead trout would be reintroduced into Solstice Creek. • Highly sensitive natural areas would be protected. • Recreation would be dispersed throughout the SMMNRA.	• Existing natural and cultural resource programs would be continued.	• Steelhead trout reintroduction would be attempted in Solstice Creek, Malibu Creek and Arroyo Sequit. Non-historic trails and recreation would be relocated away from sensitive areas. • Wildlife corridors would be identified and protected. Natural processes would be allowed to continue unimpeded except when active manipulation to manage for biological diversity or rare, threatened or endangered species or communities is deemed appropriate. • Watershed/marine interface zones would be protected and restored. • Restore disturbed non-historic areas in park to natural conditions.	• Remove any park-related activities in sensitive areas, and only recreation that is non-damaging would be encouraged. Steelhead trout would be reintroduced in Solstice Creek and Calleguas Creek and Malibu and Arroyo Sequit watershed. Simi Hills would be managed to maximize biological habitat while preserving ethnographic and historic sites. • Wildlife corridors would be identified and protected. Watershed/marine interface zones would be protected and restored.	• Nonhistoric trails would be rerouted in sensitive areas.	• Recreation would be dispersed throughout the SMMNRA. More area would be open to multiuse trails.
Visitor Experience	• Educational experiences would be enhanced through actions mentioned below. • Private outdoor recreation providers would be encouraged to meet growing outdoor recreation demand.	• Existing programs would be continued.	• Resource compatible recreation would be encouraged (hiking, wildlife observation) Environmental education programs would be increased. Only designated trails would be multi-use. Pictographs would be in low intensity areas. Pictographs would be interpreted at visitor centers and at exhibits in high intensity areas. • Scenic coastal boat tour docking would be offered, docking at Santa Monica Pier and Malibu Pier (with visitor contact station).	• Resource compatible recreation would be encouraged (hiking, wildlife observation). Environmental education programs would be increased. • Technology would be used to provide a "virtual park experience" at visitor centers outside park. • Only designated trails would be multi-use. • Pictographs would be in low intensity areas. Pictographs would be interpreted at visitor centers and at exhibits in high intensity areas.	• Resource-compatible recreation would be encouraged. • Emphasis in this alternative would be on stronger educational programs. Goal is to deliver an educational experience to every child in L.A. • Overnight educational camps would be available to groups. Only designated trails would be multiuse. • Pictographs would be accessible by trail and actively interpreted to the public.	• Recreation would be maximized. All trails would be multi-use. • Scenic coastal boat tour would be offered, docking at Santa Monica Pier and Malibu Pier.
Facility Development	Low Intensity • A portion of the Juan Batista de Anza National Historic Trail through the Simi Hills/NPS lands would be marked with commemorative signs. Moderate Intensity • Environmental education day camp would be located at Solstice Canyon. • Backbone Trail would be completed. • Day camp would be located at Rancho Sierra Vista to provide more educational programs about contemporary and traditional Native American cultures. • An accessible trail would be established at Liberty Canyon. High Intensity • Cheeseboro Canyon trailhead would be expanded. • Coastal education center would be developed at Leo Carrillo State Park, and campground would be rehabilitated. • Temescal Canyon educational day camp would be expanded. • Mission Canyon trailhead would be developed, with toilets, parking and interpretive facilities. • Research and information center would be provided at CSUCI campus.	• Same as "Actions Common to All."	High Intensity • Mugu Lagoon Visitor Education Center would be located on the western end of the NRA off the PCH. • Circle X would become a primitive overnight education camp. • Paramount Ranch would include facilities for a film history center and museum; western town set would be reused for filming and film production would be encouraged. • White Oak Farm would offer interpretive and educational programs. • The barn at Rancho Sierra Vista would be reused as an environmental education center. • The Morrison Ranch House would be rehabilitated to reflect the ranching period. The cultural landscape surrounding the house would be maintained. Morrison Ranch House and cultural landscape would be restored. • Visitor education center would be located at Malibu Bluffs. • A bicycle trail reroute around Boney Mountain Wilderness would be constructed	Moderate Intensity • The Morrison Ranch House would be rehabilitated to reflect the ranching period. The cultural landscape surrounding the house would be preserved. High Intensity • Mugu Lagoon Visitor Education Center would be located on the western end of the NRA off the PCH. • Film history center and administrative center would be located at Paramount Ranch; historic landscape would be restored. • Significant cultural, natural, and scenic resources of the Gillette Ranch would be adaptively reused for joint administration, curation and environmental and cultural education. • Visitor education center would be located at Malibu Bluffs. • Educational day camp program at WODOC would be expanded.	Moderate Intensity • An interpretive site would be established at or near Burro Flats. • Simi Hills would be managed as a historic ranching landscape, and the Morrison Ranch House and cultural landscape would be restored. High Intensity • Mugu Lagoon Visitor Education Center would be located on the western end of the NRA off the PCH. • Circle X Ranch would become an overnight education camp. • Decker Canyon would become an accessible day use and overnight environmental education center. • Peter Strauss Ranch would become a focal point for culture and fine arts education in the park. • Paramount Ranch would have a film history education center. • The barn at Rancho Sierra Vista would be an environmental education center. • A northern gateway visitor center with a large screen theater would be located near Highway 101 and as Virgenes/Malibu Canyon Roads.	Moderate Intensity • Backbone Trail would be completed with eight additional group or individual overnight campsites along the trail. • Sycamore Canyon would be designated as a multiuse corridor. High Intensity • Mugu Lagoon Visitor Education Center would be located on the western end of the NRA off the PCH. • Circle X Ranch would offer additional overnight accommodations for groups. • Decker Canyon would become an accessible day use and overnight environmental education center. • Peter Strauss Ranch facility would be expanded and the site would become a focal point for culture and fine arts education in the park. • A film history museum would be developed at Paramount Ranch. Filming activity would continue to be permitted on the set locations. • The barn at Rancho Sierra Vista would be an environmental education center, and staging facilities would be expanded.

	ACTIONS COMMON TO ALL ALTERNATIVES	NO ACTION ALTERNATIVE	PREFERRED ALTERNATIVE	PRESERVATION ALTERNATIVE	EDUCATION ALTERNATIVE	RECREATION ALTERNATIVE
		Low Intensity – (30%) Moderate Intensity – (60%) High Intensity – (10%)	Low Intensity – (80%) Moderate Intensity – (15%) High Intensity – (5%)	Low Intensity – (80%) Moderate Intensity – (15%) High Intensity – (5%)	Low Intensity – (80%) Moderate Intensity – (15%) High Intensity – (5%)	Low Intensity – (25%) Moderate Intensity – (65%) High Intensity – (10%)
Facility Development (continued)			• Significant cultural, natural, and scenic resources of the Gillette Ranch would be adaptively reused for joint administration, curation and environmental and cultural education. • 415 PCH would serve as eastern park gateway, providing visitor orientation. Exhibits would interpret southern California culture and the history of the PCH and the terminus of Route 66. • Visitor information sites would be located at LAX and El Pueblo in downtown Los Angeles. • Educational day camp program at WODOC would be expanded. • Backbone Trail would be completed with eight additional group or individual overnight campsites along the trail.		• White Oak Farm would offer exhibits interpreting early ranching in southern California. • A jointly-operated administration and environmental education center would be at the Gillette Ranch site. • A visitor education center would be located at Malibu Bluffs. • An overnight education camp would be established at Corral Canyon. • 415 PCH (Davies Home) would be rehabilitated to interpret southern California culture and the terminus of Route 66. • Educational day camp program at WODOC would be expanded. • A visitor information site would be located in Griffith Park.	• White Oak Farm would offer exhibits interpreting early ranching in southern California. • A visitor center near Highway 101 and Las Virgenes/Malibu Canyon Roads would serve as a northern gateway to the park, providing orientation and interpretation. • A visitor education center would be located at Malibu Bluffs. • Educational day camp program at WODOC would be expanded. • A visitor information site would be located in Griffith Park. • Morrison Ranch House and cultural landscape would be restored. • A visitor contact station would be developed at Exposition Park. • A visitor contact station would be established at the Santa Monica Pier.
Management Activities	• NPS and CSP would jointly administer operations when feasible. Information and telecommunication technology would be used to promote more efficient park operations. • Upper Las Virgenes Canyon and Liberty Canyon wildlife corridors would be added to park. • The principal strategy of protection for the National Park Service would be through agreement and cooperation rather than fee acquisition. • A trail management plan would be developed to address trail management and trail improvement needs.	• Headquarter facilities for the California State Parks and the Santa Monica Mountains Conservancy would remain in current location. Archeological surveys would precede all ground-disturbing activities on NRA lands.	• The NPS would play a greater role in the administration of Mugu Lagoon in cooperation with the U.S.Navy. • Recommended boundary study areas would be: the western escarpment of the Santa Monica Mountains, the area around Las Virgenes Reservoir, Conejo Valley, Ladyface Mountain, Triunfo Canyon, Marvin Braude Mulholland Gateway Park, the area east of Hidden Valley, Stone Canyon and the area north and west of Yerba Buena Road. The area north into the Simi Hills and Conejo Valley would protect critical wildlife habitat and open space through agreements with land management agencies. • Land prone to repeated hazard due to natural disasters would be proposed to FEMA for accelerated acquisition. • An archeological district of the SMMNRA would be documented and nominated to the national register.	• The Eastern portion of Mugu Lagoon would be transferred from the U.S. Navy. • Areas which would be studied for potential addition to the NRA: western escarpment of Santa Monica Mountains, a portion of Calleguas Creek watershed, the area around Las Virgenes Reservoir, Conejo Valley, Ladyface Mountain, Triunfo Canyon, Marvin Braude Mulholland Gateway Park, the area northeast of Hidden Valley, Stone Canyon and the area north and west of Yerba Buena Road. The area north into Conejo Valley, and from Simi Hills to Santa Susanna Pass would protect critical wildlife habitat and open space through agreements with land management agencies. • An archeological district of the SMMNRA would be documented and nominated to the national register.	• The NPS would play a greater role in the administration of Mugu Lagoon in cooperation with the U.S. Navy. • Recommended boundary study areas would be: area west of La Jolla Peak, the western escarpment of the Santa Monica Mountains, the open space east of Hidden Valley, Marvin Braude Mulholland Gateway Park, Ladyface Mountain, Triunfo Canyon the area around the Las Virgenes Reservoir, and the area north and west of Yerba Buena Road.	• There would be no boundary expansions except those listed in "Actions Common to All."
Transportation	• Visual and recreational elements of Mulholland Drive and Highway would be promoted and preserved. Limiting of roadway expansion would be supported. Transportation centers would be developed. Transportation education would be provided. Improved management of PCH would be supported. Alternative fuels would be used. • Bicycling on paved routes and developed trails, as well as bicycle parking racks, would be encouraged as an alternative form of transportation. • The park would promote transit operations and ride-sharing programs.	• Same as "Actions Common to All."	• Mulholland would be cooperatively managed to emphasize its continuity, historic significance and scenic values. • A tour shuttle loop would travel Mulholland, PCH, and Malibu Canyon Road connecting points of interest as well as picking up and dropping off hikers and surfers. This loop plus PCH from P.t Mugu to Sequit Point and the rest of Mulholland east of its intersection with Malibu Canyon Road would also be a scenic corridor.	• Mulholland would be cooperatively managed to emphasize its continuity, historic significance and scenic values. • A tour shuttle loop would travel Mulholland, PCH, and Malibu Canyon Road connecting points of interest as well as picking up and dropping off hikers and surfers. This loop plus PCH from Pt. Mugu to Sequit Point and the rest of Mulholland east of its intersection with Malibu Canyon Road would also be a scenic corridor.	• Mulholland Drive, Topanga Canyon Boulevard, Pacific Coast Highway, Malibu Canyon Road, Kanan-Dume Road and Decker Canyon Road would be designated scenic corridors. • A tour shuttle loop would travel Mulholland, PCH, and Malibu Canyon Road connecting points of interest as well as picking up and dropping off hikers and surfers. This loop plus PCH from Pt. Mugu to Sequit Point and the rest of Mulholland east of its intersection with Malibu Canyon Road would also be a scenic corridor.	• Same as Education Alternative, except Decker Canyon would not be included as a scenic corridor. • Shuttle services would be explored.

SUMMARY OF ENVIRONMENTAL CONSEQUENCES AND MITIGATION MEASURES

	MITIGATION MEASURES COMMON TO ALL ALTERNATIVES	NO ACTION ALTERNATIVE	PREFERRED ALTERNATIVE	PRESERVATION ALTERNATIVE	EDUCATION ALTERNATIVE	RECREATION ALTERNATIVE
Natural Resources						
Air Quality	• Use best available control measures for fugitive dust during high wind conditions. Include additional mitigation measurers that address equipment exhaust and using clean diesel fuel and engines as much as possible. See details in "Summary of Mitigation Measures Common to All Alternatives" section.	• Facilities and trail segment development without mitigation could result in localized short-term moderate adverse impacts. Sensitive individuals could suffer from adverse health effects, and visibility conditions in the park could be impacted. Following mitigation, impacts from construction activities would be minor. There would be no significant changes to the existing mobile source emissions within the SMMNRA from actions proposed in this alternative. However, improvements in transit opportunities (park shuttle buses) and the use of alternative fuels in park fleet vehicles would slightly improve the existing air quality conditions within the SMMNRA.	• Same as no action alternative.	• Same as no action alternative.	• Same as no action alternative.	• Same as no action alternative.
Soundscapes	• In accordance with normal construction practice, noise-generating construction equipment would be equipped with effective noise control devices (i.e., mufflers, lagging, and/or engine closures). All equipment would be properly maintained to ensure that no additional noise would be generated. Noise from construction activities would be limited according to the appropriate sections of the City of Los Angeles Noise Ordinance Subchapters 112 and 41.4. SMMNRA would further prevent and/or minimize construction noise by managing its intensity, frequency, magnitude, and duration in any one place on any particular day.	• Construction noise might result in temporary short-term moderate to major impacts on ambient noise levels in and near construction sites. Noise generated by demolition and excavation equipment, including trucks, graders, bulldozers, concrete mixers, and portable generators, would constitute the most persistent sources of noise during construction projects. Noise impacts sufficient to cause annoyance, negatively impact visitor enjoyment, and/or interfere with regular conversations would occur in short episodes in and near construction sites. The NRA would take action to prevent or minimize all noise that, through intensity, frequency, magnitude, and duration adversely affects the natural soundscapes and other park resources or values. Specific mitigation measures would be included in all facility development-specific plans.	• Same as no action alternative.	• Same as no action alternative.	• Same as no action alternative.	• Same as no action alternative.
Soils and Geological Hazards	• The following mitigation measures common to all alternatives would be recommended and would reduce the impacts to minor levels: 1. *Soil erosion control measures would be included in all facility development specific plans and would be considered when implementing any of the activities proposed.* 2. *New facilities would be sited to avoid geologic hazard zones. New facilities and the modification of existing facilities would be designed and constructed in compliance with all applicable state and federal building code standards.* 3. *All grading and construction plans would be reviewed by a qualified professional for geologic and geotechnical review prior to approval.*	• Construction impacts to soils would be considered minor to moderate because construction sites are local, construction activities would be intermittent, and the implementation of mitigation measures would reduce the impacts to minor. Localized adverse impacts on soil erosion due to facilities development, fuel management, fire suppression, search and rescue operations, trail maintenance, visitor uses, unplanned fires would also be minor with mitigation. Potentially major impacts due to geologic hazards would occur due to the potential for substantial human safety risk and property loss; following mitigation impacts would be reduced to minor.	• Direct and indirect impacts on soil and geologic resources resulting from the preferred alternative are similar to the minor to moderate short-term impacts associated with the no action alternative. • Beneficial effects of the preferred alternative include plans to restore disturbed areas in the recreation area to natural conditions. There would be a modest decrease in erosion and resultant siltation under this alternative compared to the no action alternative due to a greater proportion of the area designated as low intensity use.	• Direct and indirect adverse impacts on soils and geology in the preservation alternative would be the lowest of all alternatives analyzed. Impacts from facility and trail segment development in this alternative are similar to the no action alternative and minor to moderate. With mitigation, impacts would be reduced to minor or negligible. • Potential beneficial effects would be greatest for the preservation alternative as compared to the other alternatives because the risk of fires and subsequent soil erosion would decrease throughout the recreation area.	• Minor to moderate short-term impacts on soils and geology from facility development in this alternative are similar to the no action alternative but would affect a larger area due to the increased number of facilities. With the rehabilitation of existing recreation area developments, impacts of erosional soil loss should be beneficial. Impacts on soil from fire management and facility development in this alternative would potentially be greater than from the no action alternative, but would remain moderate. • Similar to previous alternatives, geologic hazards could impose major adverse impacts to public health and property as a result of facilities and trail segment development. This alternative includes more facilities and improvements than the no action alternative and would therefore increase potential exposure to geologic hazards.	• Proposed facilities and trail segment development would have direct minor to moderate adverse impacts on soils and geology. Impacts would include the removal and disturbance of soils and geologic deposits through construction activities, such as cut and fill, grading, and paving. Removal of soils and vegetation by surface disturbing activities could also result in increased soil erosion that can, in turn, adversely affect off-site vegetation and increase siltation in downstream watercourses. Minor to moderate adverse impacts on soils could also result from fire management, fire suppression, search and rescue operations, and trail maintenance. No beneficial effects to soil and geologic resources are anticipated for the recreation alternative.

	MITIGATION MEASURES COMMON TO ALL ALTERNATIVES	NO ACTION ALTERNATIVE	PREFERRED ALTERNATIVE	PRESERVATION ALTERNATIVE	EDUCATION ALTERNATIVE	RECREATION ALTERNATIVE
Natural Resources						
Soils and Geological Hazards *(cont'd)*	• *4. Geotechnical and geologic hazard investigations would be conducted prior to project implementation with a focus on projects in areas of concern.*		• Geologic hazards could impose major adverse impacts to public health and property as a result of facilities and trail segment development. This alternative includes more facilities and improvements than the no action alternative and therefore increased potential exposure to geologic hazards. The mitigation measures described under the mitigation common to all alternatives would reduce impacts for soils and geologic hazards to minor.	• Geologic hazards could impose adverse impacts on public health and property as a result of facilities and trail segment development and would be reduced to a minor level with mitigation, as described under mitigation common to all alternatives.	• Mitigation measures would reduce impacts for soils and geologic hazards to minor.	• Geologic hazards could impose major adverse impacts to public health and property after facilities development. Potential impacts resulting from geologic hazards would be limited to areas where facilities would be added. This alternative includes more facilities and improvements than the no action alternative and would therefore increase potential exposure to geologic hazards. • Mitigation for soils and geologic hazards would reduce adverse impacts to minor.
Floodplains	• Mitigation measures could reduce the adverse impacts related to floodplains to minor. *1. During siting of structures and use areas for proposed facilities in the vicinity of a floodplain, an engineering evaluation would be conducted by a qualified engineer to identify the boundaries of the 100-year floodplain. Unless infeasible, structures and use areas would be located outside the floodplain boundaries.* *2. Facilities and trails within the 100-year floodplain would be closed 24 hours prior to a predicted 50-year, 24-hour storm event.* *3. Signs would be provided at the floodplain boundary on trails and access roads alerting park users that they are about to enter an area prone to flooding during wet weather conditions.*	• The no action alternative could result in potentially moderate long-term impacts to floodplains related to the Leo Carrillo State Park campground. The designation of high intensity use that encompasses the Arroyo Sequit stream floodplain could also result in adverse impacts depending on facility location. However, given implementation of the mitigation measures described, adverse impacts to people and property from flooding are expected to be minor (in most of the park lands) to moderate (at Leo Carrillo State Park) over the long term.	• The preferred alternative could result in potentially moderate adverse long-term impacts related to the proposed facilities and the designation of high intensity use that encompasses the Malibu and Calleguas Creek and Arroyo Sequit stream floodplains. This alternative could result in potentially moderate long-term impacts to floodplains related to the Leo Carrillo State Park campground. Beneficial effects would be associated with the resource management actions on table 8 such as watershed and coastal resource management and protection of wildlife corridors. Mitigation measures would reduce the adverse impacts related to floodplains to minor.	• The preservation alternative could result in potentially moderate adverse long-term impacts related to the proposed facilities and the designation of high intensity use that encompasses the Malibu and Calleguas Creek floodplains and the Arroyo Sequit stream floodplain. There could be moderate long-term impacts to floodplains related to the Leo Carrillo State Park campground rehabilitation. • Mitigation measures would reduce the adverse impacts related to floodplains to minor.	• The education alternative could result in potentially moderate adverse long-term impacts related to the proposed facilities and the designation of high intensity use that encompasses the Malibu and Calleguas Creek floodplains and the Arroyo Sequit stream floodplain. There could be moderate long-term impacts to floodplains related to the Leo Carrillo State Park campground rehabilitation. • Mitigation measures would reduce the adverse impacts related to floodplains to minor.	• The recreation alternative could result in potentially moderate adverse long-term impacts related to the proposed facilities and the designation of high intensity use that encompasses the Calleguas and Malibu Creek and Arroyo Sequit stream floodplains. There could be moderate long-term impacts to floodplains related to the Leo Carrillo State Park campground rehabilitation. • The mitigation measures would reduce the adverse impacts related to floodplains to minor.
Water Resources	• Mitigation measures could reduce the adverse impacts related to floodplains to minor. *1. A construction storm water management plan would be prepared for all construction activities affecting one or more acres to minimize soil disturbance.* *2. Fueling and servicing of construction equipment would not occur within 100 feet of a water body or drainage area unless adequate spill control/containment is provided.* *3. A soils and engineering evaluation would be conducted to support the location and design of all septic system repairs, upgrades and installations.* *4. The administering agencies would incorporate the treatment of the runoff from developed areas into facility design plans to reduce pollutants reaching waterways wherever applicable.*	• The no action alternative would have a minor to moderate adverse impact on water resources from increased runoff, soil erosion, and pollutants. All impacts would be reduced to minor levels, with implementation of mitigation measures.	• Under the preferred alternative, minor adverse impacts are expected to water resources in the areas that are proposed to be developed with visitor and education centers and expanded campgrounds, trailheads, and accessible trails including reduced water quality, potential flooding and potential reduced flows from water extraction. • The overall impacts on water quality of the preferred alternative would be minor provided appropriate mitigation measures are employed. The most emphasis should be placed on the construction of new facilities (water quality and quantity impacts) and on the restoration of degraded trails in the low intensity areas (water quality improvements). The overall areas that are proposed for development with facilities are small compared to the overall watershed and therefore are expected to only provide minimal additional impacts compared to existing conditions.	• Among the action alternatives, the preservation alternative would have the least adverse effect on the water resources in the SMMNRA. By placing more emphasis on the preservation of natural systems, the likely pollutant and physical impacts from this alternative would be reduced relative to no action. Moderate impacts from proposed facilities such as the visitor center and increased trailhead parking could adversely affect the water quality of the water resources. Mitigation measures would decrease adverse impacts to a minor level: *1. Restroom facilities would be planned to minimize the delivery of pathogens to groundwater and surface water. A soils and engineering evaluation would be conducted by qualified engineers to support the location and design of all septic system repairs, upgrades, and installations.*	• Overall, the education alternative would have a minor adverse impact on the water resources of the area, provided appropriate mitigation measures are employed and maintained. There might be some moderate beneficial effects of the educational proposal by reducing visitor numbers to parts of the recreation area, and by closing and restoring some tracks in the area. The mitigation measures would decrease these impacts to minor intensities. *1. Restroom facilities would be planned to minimize the delivery of pathogens to groundwater and surface water. A soils and engineering evaluation would be conducted by qualified engineers to support the location and design of all septic system repairs, upgrades, and installations.*	• Overall, the recreation alternative would potentially provide the most adverse impacts on the recreation area's resources compared with the other alternatives. However, these effects could be reduced through mitigation so that the health of waterways is not seriously impacted and impacts would be reduced to minor. Mitigation measures include the following: *1. Restroom facilities would be planned to eliminate the delivery of pathogens to groundwater and surface water. A soils and engineering evaluation would be conducted by qualified engineers to support the location and design of all septic system repairs, upgrades, and installations.*

	MITIGATION MEASURES COMMON TO ALL ALTERNATIVES	NO ACTION ALTERNATIVE	PREFERRED ALTERNATIVE	PRESERVATION ALTERNATIVE	EDUCATION ALTERNATIVE	RECREATION ALTERNATIVE
Natural Resources (cont'd.)						
Water Resources *(cont'd)*			The following mitigation measures, in addition to those described under measures common to all alternatives, would further reduce the impacts associated with the preferred alternative. 1. *Restroom facilities would be planned to minimize the delivery of pathogens to groundwater or surface water. A soils and engineering evaluation would be conducted by a qualified engineer to support the location and design of all septic system repairs, upgrades and installations.* 2. *If on-site surface or groundwater will be used as a potable water source for new facilities and camps, the administering agencies would study sources of drinking water for camps to avoid the over-extraction of water.*			
Biological Resources and Wetlands	• Mitigation through revegetation and avoidance would reduce each of these impacts to minor or negligible levels. 1. *Undisturbed native vegetation would be avoided when new facilities are sited.* 2. *All grading and construction plans would be reviewed prior to approval by qualified administering agency technical staff.* 3. *Areas temporarily disturbed during construction would be recontoured and revegetated with appropriate native plant species by a qualified biologist, and appropriate fuel management zones would be maintained around developed structures.* 4. *Erosion control measures would be considered and implemented for surface disturbing activities, such as construction or trail maintenance.* 5. *Pre-project surveys for sensitive species would be conducted prior to project implementation. Wetland delineation would also be conducted as appropriate.* 6. *The administering agencies would consult with the USFWS, NMFS (for steelhead trout), ACOE and the California Coastal Commission (for wetlands), and/or CDFG as appropriate during the detailed planning phase of a project, if any listed species or its habitat might be affected during a proposed action.* 7. *Surface disturbing activities in or in close proximity to, sensitive vegetative resources (e.g., wetlands, listed species habitat) would be monitored during construction by a qualified biologist.* 8. *Best management practices would be implemented during construction.*	• Moderate to minor potential impacts on common plant communities and vegetation are expected from proposed facilities development, including the removal and disturbance of vegetation through construction activities, such as cut and fill, grading, paving, and trail segment development. Minor to negligible impacts on sensitive plants species and wetlands would be expected because facilities will be developed in areas that were previously disturbed. Negligible to major indirect effects would include invasion by exotic plant species into newly disturbed areas and the elimination or alteration of some wetlands and riparian vegetation in streambeds. A variety of edge effects, such as noise and lighting disturbances to wildlife and losses of vegetation from foot traffic, could be expected within an interface zone of existing and future facilities having relatively high human usage. Negligible to major adverse impacts on vegetation could also result from fuel management, fire suppression, search and rescue operations, and trail maintenance. • Beneficial effects of the no action alternative include plans to close, reroute and revegetate trails in or near sensitive resources., and to remove or restore some roads to a natural condition, or reconfigure them to low impact trails. This would avoid or reduce the risk and intensity of potential impacts on sensitive species near these installations to a minor level.	• Direct and indirect adverse impacts on native vegetation in the preferred alternative would be similar to the education and preservation alternatives. A variety of edge effects, such as noise and lighting disturbances to wildlife and losses of vegetation from foot traffic, could be expected within a zone of existing and future facilities having relatively high human usage. The width of such edge effects will be analyzed in the documentation prepared for each project. Moderate adverse impacts on native vegetation would result from requirements of fuel management zones around developed structures. Impacts from fuel management and facility development in the preferred alternative would be moderately higher than in the no action alternative. In contrast to the no action alternative, the preferred alternative would result in a net gain of wetland and other native vegetation acreage as recommended boundary changes were implemented. • The length of the scenic corridor designations in the SMMNRA would be modified to include Malibu Canyon Road. This would likely moderately increase the risks of wildfires in the vegetation near Malibu Canyon Road. • Beneficial effects of the preferred alternative include rerouting and revegetating trails in or near sensitive resources. • About 80 percent of the SMMNRA area would be designated as low intensity areas where visitor access to sensitive resources would be neither facilitated nor encouraged. The low intensity areas would be generally surrounded by moderate intensity areas, which would act as buffers between the low intensity areas and the higher use areas.	• Because most lands within the SMMNRA would be designated for low intensity use, impacts on biological resources throughout the recreation area would be expected to be minor and reduced from levels expected in the no action and other alternatives. In contrast to the no action alternative, the preservation alternative would result in a net gain of wetland and other native vegetation acreage as recommended boundary changes were implemented. Potential impacts due to facility siting and impacts to sensitive species could still range from negligible to major, however. The elimination of some camping in the recreation area would greatly reduce the risk of fires, and their resultant impacts, in the moderate and low intensity areas. Implementation of the preservation alternative would greatly enhance the existence and connectivity of undisturbed habitats in the SMMNRA by creating very large expanses of open space, with a nearly continuous connection along the entire east/west axis of the recreation area, all designated as a low intensity area. The mitigation measures would reduce adverse impacts to biological resources and wetlands to minor. Additionally: 1. *BMPs would be implemented during construction, such as temporary retention basins or prohibition against servicing construction vehicles within 100 feet of riparian corridors.* 2. *Fire clearance zones would be incorporated into the planning of developments.* 3. *Educational efforts, such as posting fire hazard signs, would be effective in reducing the likelihood of visitor-caused fires, and their resultant impacts.*	• Because most lands within the SMMNRA would be designated for low intensity use, impacts on biological resources and wetlands throughout the recreation area would be reduced from levels expected in the no action alternative but would still range from negligible to major, depending on the extent and sensitivity of species impacted. The increase in lands designated as low intensity areas would greatly reduce the risk of fires, and their resultant impacts in the moderate and low intensity areas. • Facilities and trail segment development would have direct, localized adverse impacts on some wildlife species, especially those that are adapted to use of disturbed habitats. There is little potential for decreases in the habitat available for endangered, threatened, rare or sensitive species of wildlife in this alternative. Impacts on wildlife from facility development in this alternative are negligible to minor, similar to the no action alternative. With the rehabilitation of existing recreation area developments, impacts on the acreage of habitat available for wildlife, in balance, should be beneficial. Visitor uses, such as horseback riding and mountain biking, would be mostly eliminated from low intensity areas in this alternative. This would be a moderate long-term beneficial effect on biological resources and wetlands.	• Proposed facilities development in the recreation alternative would have negligible to major direct impacts on vegetation. Adverse impacts of these development activities could include the removal and disturbance of native vegetation through construction activities, such as cut and fill, grading, and paving. Removal of vegetation by surface-disturbing activities could also result in increased soil erosion (see soils and geology) that can, in turn, adversely affect off-site vegetation and increase siltation in downstream watercourses. Resulting negligible to major adverse effects would include invasion by exotic plant species into disturbed areas and the elimination or alteration of riparian vegetation in streambeds. • Negligible to major adverse impacts on natural vegetation could also result from fire management, fire suppression, search and rescue operations, and trail maintenance. Visitor uses, such as camping, could also result in soil erosion and disturbance or removal of vegetation. An increase in unplanned fires, and their resultant impacts, resulting from increased visitor use would likely occur. Typical edge effects are expected to be substantially greater for the recreation alternative compared to the no action alternative.

	MITIGATION MEASURES COMMON TO ALL ALTERNATIVES	NO ACTION ALTERNATIVE	PREFERRED ALTERNATIVE	PRESERVATION ALTERNATIVE	EDUCATION ALTERNATIVE	RECREATION ALTERNATIVE
Natural Resources (cont'd.)						
Biological Resources and Wetlands *(cont'd)*	9. *Construction monitoring would be provided by a qualified biologist in areas supporting sensitive wildlife resources.* 10. *The administering agencies would implement projects that would avoid wetlands, other sensitive habitats and habitat linkage areas through careful project siting.* 11. *A qualified biologist within the administering agencies would evaluate all proposed actions for their affects on habitats and on habitat connectivity to avoid further habitat fragmentation.* 12. *New developments would be excluded from existing wildlife corridors, or minimized to the greatest extent practicable, to ensure the continued exchange of genes and individuals between wildlife populations within and adjacent to the SMMNRA.* 13. *Degraded habitats within conserved linkage areas would be restored where feasible.*	• Minor to negligible direct impacts on wildlife would be expected from facilities development. Direct effects would generally be localized on wildlife species. Visitor uses, such as hiking, horseback riding, and mountain biking, could have both direct and indirect, adverse effects on wetlands and all classes of wildlife especially if these uses occur in wildlife corridors and linkages. Proposed facilities development could have potentially major direct impacts on habitat connectivity if movement corridors cannot be avoided. Mitigation through revegetation and avoidance would reduce each of these impacts to minor or negligible levels.	Typical edge effects would be less for the preferred alternative compared to the no action alternative. • The preferred alternative includes the provision of proposed boundary changes and future boundary studies to create additional resource protection along the west-central borders of the park and initiation of agreements with land management agencies to protect land north of the park. Such boundary changes would potentially provide additional protection to vegetation in the linkages within Ventura County. The no action alternative does not include this provision. • Facilities and trail segment development would have negligible to minor direct, localized impacts on some wildlife species, especially those that are adapted to use of disturbed habitats. There is little potential for decreases in the habitat available for endangered, threatened, rare or sensitive species of wildlife in this alternative. Impacts from facility development under this alternative would be higher than those of the no action alternative. Visitor uses, such as hiking, horseback riding, and mountain biking would have direct and indirect adverse effects on all classes of wildlife. Impacts from visitor uses under in the preferred alternative would be beneficial, primarily due to the park's designation of low intensity use zones. Impacts to wetland resources would range from minor to moderate and short term as a result of facilities development and visitor use. Implementation of the preferred alternative would enhance the connectivity of undisturbed habitats in the SMMNRA by creating very large expanses of open space. In comparison with the no action alternative, connectivity of habitat and movement corridors would be enhanced by the increase in designated low intensity areas. Further, the potential addition of lands on the western and northern boundaries of the park would increase the amount of conservation and connectivity of habitats in those areas. • In general, mitigation measures would be effective in avoiding or minimizing loss of natural vegetation, and permanent loss in the low intensity areas would be minor as result of the preferred alternative. Because most lands within the SMMNRA would be designated for low intensity use, impacts on biological resources and wetlands throughout the park would be reduced from levels expected in the no action alternative.	4. *If vegetation is lost or disturbed from any visitor-related activity, the area would be rehabilitated or revegetated with species from an appropriate native plant palate from local seed/plant sources.* 5. *Habitat connectivity would be maintained through the implementation of sufficiently wide (greater than 400 feet) habitat linkages between major blocks of habitat.* 6. *Whenever possible, documented wildlife movement areas within the park would be improved with the appropriate NEPA/CEQA documentation for that project.*	• Implementation of the education alternative would greatly enhance the existence and connectivity of undisturbed habitats in the SMMNRA. The scenic corridors would be expanded into the interior of the low intensity areas, including Topanga Canyon Boulevard, Malibu Canyon Road, Kanan Dume Road, and Decker Road. This expansion would increase the risk of fire in the eastern three fourths of the SMMNRA. The education alternative, which includes recommended boundary changes would increase the connectivity of habitats along the northern border of the current recreation area boundaries, from Hidden Valley, eastward to the Cheeseboro/Palo Comado Canyons area, and along the entire western edge of the current SMMNRA boundaries, including Mugu Lagoon. The mitigation measures discussed would reduce adverse impacts to biological resources and wetlands to minor. 1. *BMPs would be implemented during construction, such as temporary retention basins or prohibition against servicing construction vehicles within 100 feet of riparian corridors.* 2. *Fire clearance zones would be incorporated into the planning of developments.* 3. *Educational efforts, such as posting fire hazard signs, would be effective in reducing the likelihood of visitor caused fires, and their resultant impacts.* 4. *If vegetation is lost or disturbed from any visitor-related activity, the area would be rehabilitated or revegetated with species from an appropriate native plant palate from local seed/plant sources.* 5. *Habitat connectivity would be maintained through the implementation of sufficiently wide (greater than 400 feet) habitat linkages between major blocks of habitat.* 6. *Whenever possible, documented wildlife movement areas within the park would be improved with the appropriate NEPA/CEQA documentation for that project.*	• Facilities development would have direct, localized impacts on some wildlife species. There is the potential for decreases in the available habitat for endangered, threatened, rare or sensitive species of wildlife if vegetation and wildlife habitats are committed to permanent development. Typical edge effects would be expected in habitats directly adjacent to developed areas. The recreation alternative would increase the spatial extent of visitor uses, such as hiking, horseback riding and mountain biking, which could have direct and indirect, adverse effects on wildlife. Of particular concern is wildlife access to water sources. Adverse human-wildlife interactions are likely to be more frequent with the recreation alternative compared to the no action alternative and could result in moderate to major impacts. • As with vegetation, proposed facilities development could have major direct impacts on habitat connectivity. Any loss, disturbance, or degradation of vegetation in habitat linkages and wildlife movement corridors would also have an adverse impact on an area's value as habitat. • No beneficial effects on biological resources are anticipated for the recreation alternative. • In general, the mitigation measures discussed measures common to all alternatives would be effective in avoiding or minimizing loss of vegetation and reducing impacts to minor. Permanent loss of currently vegetated natural areas would be similar to or greater than the no action alternative. Long-term health of vegetation on privately held land would partially depend upon local enforcement of land use and building permits by other local agencies, such as within the Los Angeles County Significant Ecological Areas that are not within the jurisdiction of the SMMNRA. 1. *BMPs would be implemented during construction, such as temporary retention basins or prohibition against servicing construction vehicles within 100 feet of riparian corridors.* 2. *Fire clearance zones would be incorporated into the planning of developments.* 3. *Educational efforts, such as posting fire hazard signs, would be effective in reducing the likelihood of visitor caused fires, and their resultant impacts.* 4. *If vegetation is lost or disturbed from any visitor-related activity, the area would be rehabilitated or revegetated with species from an appropriate native plant palate from local seed/plant sources.*

	MITIGATION MEASURES COMMON TO ALL ALTERNATIVES	NO ACTION ALTERNATIVE	PREFERRED ALTERNATIVE	PRESERVATION ALTERNATIVE	EDUCATION ALTERNATIVE	RECREATION ALTERNATIVE
Natural Resources (cont'd.)						
Biological Resources and Wetlands *(cont'd)*			The following mitigation measures, in addition to those described under measures common to all alternatives, would further reduce these impacts. 1. *BMPs would be implemented during construction, such as temporary retention basins or prohibition against servicing construction vehicles within 100 feet of riparian corridors.* 2. *Fire clearance zones would be incorporated into the planning of developments.* 3. *Educational efforts, such as posting fire hazard signs, would be effective in reducing the likelihood of visitor-caused fires and their resultant impacts.* 4. *If vegetation is lost or disturbed from any visitor-related activity, the area would be rehabilitated or revegetated with species from an appropriate native plant palate from local seed/plant sources.* 5. *Habitat connectivity would be maintained through the implementation of sufficiently wide (greater than 400 feet) habitat linkages between major blocks of habitat.* 6. *Whenever possible, documented wildlife movement areas within the park would be improved with the appropriate NEPA/CEQA documentation for that project.*			5. *Habitat connectivity would be maintained through the implementation of sufficiently wide (greater than 400 feet) habitat linkages between major blocks of habitat.* 6. *Whenever possible, documented wildlife movement areas within the park would be improved with the appropriate NEPA/CEQA documentation for that project.*
Paleontological Resources	• The following mitigation measures would reduce the impacts on paleontological resources to minor. 1. *When planning new facilities, modified facilities and fuel management that requires grading, a qualified professional would determine the paleontologic sensitivity of affected sediments.* 2. *If excavation occurs in sediments that have high to moderate paleontologic sensitivity, then the administering agencies would hire a qualified paleontologic monitor during excavation.* 3. *If fossils were discovered during grading or construction, these activities would halt in the immediate vicinity of the find until the fossils have been removed in a scientifically controlled fashion by a qualified paleontologist.* 4. *The administering agencies would implement public education regarding the scientific and educational importance of fossils and promote awareness of enforcement of California State and NPS non-collection policies.*	• Proposed facility developments could affect previously undisturbed sediments possessing moderate to high paleontologic sensitivity, resulting in moderate adverse impacts to paleontologic resources. Increased visitor use would also adversely affect paleontologic resources through unauthorized collection and consequent loss of the scientific and educational potential of those resources. This impact would be minor. The mitigation measures discussed would reduce the impacts on palentological resources to minor.	• Under the preferred alternative, impacts to paleontologic resources would result from grading related to facility development, fuel management and trail development. Moderate adverse short-term impacts to paleontologic resources could result from the disturbance of sediments during construction activities. Unauthorized collection of fossils could result in loss of the scientific and educational potential of those specimens, and would constitute a minor adverse, long-term impact. The mitigation measures would reduce impacts to minor.	• The preservation alternative would result in less impact to paleontologic resources compared to any of the other alternatives. Moderate adverse short-term impacts to sediments possessing moderate to high paleontologic sensitivity is nevertheless expected from construction excavations, fuel management, fire suppression operations, rerouting and revegetating trails. The mitigation measures are recommended to reduce adverse impacts to minor.	• Moderate short-term impacts to paleontologic resources would be much the same under the education alternative as the preferred alternative. Most of the facilities would be placed in previously disturbed areas, effectively reducing the level of impacts. Enhancement of facilities associated with the scenic corridors would result in direct minor and moderate adverse impacts to paleontologic resources. The mitigation measures would reduce adverse impacts to minor.	• The level of dispersed recreational activities within the SMMNRA would be greater under the recreation alternative than under any alternative. Long-term moderate adverse impacts to paleontologic resources would result from an increased number of trails and trail use. Moderate impacts would be evident in the erosion of sediments of moderate to high paleontologic potential, an increase in the frequency of unauthorized collection of fossils, fire management or suppression operations, construction of new facilities. The mitigation measures would reduce impacts to minor. The administering agencies would implement public education regarding the scientific and educational importance of fossils and promote awareness of enforcement of California and NPS non-collection policies.

	MITIGATION MEASURES COMMON TO ALL ALTERNATIVES	NO ACTION ALTERNATIVE	PREFERRED ALTERNATIVE	PRESERVATION ALTERNATIVE	EDUCATION ALTERNATIVE	RECREATION ALTERNATIVE
Cultural Resources						
Archeological Resources, Historic Structures, Cultural Landscapes and Ethnographic Resources	• The administering agencies shall inventory cultural resources, historic structures, and cultural landscapes in accordance with Section 110 of the National Historic Preservation Act of 1966, as amended (16 USC 470). CSP would be guided by the *California Public Resources Code*. • Actions related to potentially historic roads and trails need to be assessed by a historical landscape architect or landscape historian as well as an archeologist. • Actions that would affect historic properties that include historic structures need to be assessed by a historical architect as well as a historical landscape architect and/or archeologist.	• The no action alternative would have impacts on cultural resources. This is largely due the designation of 60 percent of the SMMNRA lands as moderate use and 10 percent as high use. As a result, only 30 percent would have a low intensity designation, the classification that offers the most protection to historic properties. A potentially high number of cultural resources would be at risk by project impacts and the potential for unintended damage without mitigation would be high. With mitigation, these negligible to moderate impacts would be further reduced. 1. *The interpretive/educational outreach of SMMNRA, which includes conducting programs for schoolchildren, would be enhanced as funding allows.* 2. *To ensure that adequate consideration and protection are accorded archeological resources, record searches and, where appropriate, archeological surveys would precede all ground disturbing activities on recreation area lands. Archeological and Native American Indian monitoring would occur by a qualified archeologist and a Native American Indian representative where ground disturbance is expected in the vicinity of known or suspected cultural resources.* 3. *All preservation, rehabilitation, restoration, and preservation efforts, as well as daily, cyclical, and seasonal maintenance, would continue to be conducted in accordance with the NPS Management Policies (2001) and Cultural Resource Management Guidelines (1996), and the Secretary of the Interior's Standards for the Treatment of Historic Properties (1995).* 4. *Historic architectural studies and plans for modification would be developed by qualified architects, historians, and architectural historians to reduce damage to the historic integrity of structures and ensure the highest levels of compatibility possible.* 5. *Actions undertaken to minimize erosion along historic roads and trails would be implemented in accordance with the Secretary of the Interior's Standards for the Treatment of Historic Properties (1995) and would preserve the integrity of these cultural resources.* 6. *A cultural resources inventory, evaluation, and assessment program conducted by a qualified NPS and/or state park archeologist would precede all trail construction.*	• The preferred alternative offers a very high level of protection to cultural resources, reserving 80 percent of lands for low intensity uses, 15 percent for moderate, and 5 percent for high. This is comparable to the education alternative, and substantially higher protection than the recreation alternative. Component actions of the preferred alternative would result in greater potential for adverse impacts to cultural resources than the no action and preservation alternatives, but reduced by comparison to the education and recreation alternatives. As a consequence, there would be a decrease in the potential number of cultural resources that would be affected by project impacts and require mitigation relative to the no action alternative. The potential for unintended damage without mitigation would also decrease. Impacts to cultural resources from the preferred alternative would be minor with the implementation of the mitigation measures including: 1. *A cultural resources inventory would be completed to assess the potential to adversely impact archeological deposits in this area.* 2. *Monitoring by a qualified NPS and/or state park archeologist and a Native American Indian would accompany any ground-disturbing activities. If unknown resources were identified at this time, construction would be halted until the significance of the find is determined.* 3. *To assist with visitor education, the Mugu Lagoon Visitor Education Center would include information on traditional lifeways and the significance of the settlement of Muwu to the cultural history of the area.* 4. *The APE for cultural resources would be defined, a record review conducted, and a pedestrian survey completed.* 5. *Management plans would incorporate measures to reduce or eliminate indirect and direct impacts to cultural resources.* 6. *Compliance with Section 106 of the NHPA and CEQA would be required for all construction activities that alter the characteristics of a historic structure.* 7. *At the Gillette Ranch, Circle X Ranch, Rancho Sierra Vista, and LIberty, Solstice, and Cheeseboro Canyons monitoring by a qualified NPS and/or state park archeologist and a Native American Indian would accompany any ground-disturbing activities.*	• The preservation alternative offers a high level of protection to cultural resources, given this alternative proposes the fewest facilities and that 80 percent of the lands are designated low intensity, 15 percent moderate intensity, and 5 percent high intensity. In addition, component actions under this alternative are largely designed to minimize impacts. As a result, there would be a decrease in the potential number of cultural resources that would be affected by project activities and mitigation. The potential for unintended damage without mitigation would also decrease with this alternative. Adverse impacts would be reduced to negligible with the mitigation discussed in the analysis of impacts section, including: 1.*All construction or revegetation projects involving ground disturbance would be preceded by a cultural resource inventory, evaluation, and impact assessment program conducted by a qualified NPS and/or state park archeologist.* 2.*Concerned Native American Indian groups would be consulted regarding potential impact to cultural landscapes of traditional significance and would assist in developing appropriate mitigation measures.* 3. *Management plans developed or amended to accommodate overnight uses in the vicinity of historic settlements would be reviewed by the qualified staff for conformance with applicable federal, state, and local statutes and regulations regarding cultural resources.* 4. *A cultural resources inventory, including subsurface exploration, would be completed by a qualified archeologist prior to the finalization of plans associated with the Mugu Lagoon Visitor Education Center to assess the potential to adversely impact archeological deposits in this area. Monitoring by a qualified NPS and/or state park archeologist and a Native American Indian would also accompany any ground-disturbing activities. To assist with visitor education, the Mugu Lagoon Visitor Education Center would include information on traditional lifeways and the significance of the settlement of Muwu to the cultural history of the area.* 5. *A qualified NPS and/or state park archeologist at the Leo Carrillo State Park site would conduct an inventory, evaluation, and impact assessment program. If resources were identified, mitigation measures would include avoidance or data recovery.*	• The education alternative offers a fairly high level of protection to cultural resources, providing for a designation of 75 percent of lands as low intensity, 20 percent as moderate intensity, and 5 percent as high intensity. The overall long-term potential for cultural resources to be at risk by project impacts and required mitigation would be somewhat less than at the present level, given the high percentage of lands designated for low intensity use. However, negligible to major adverse impacts from component actions would likely occur. These adverse impacts would be reduced to negligible levels with implementation of mitigation, including: 1. *A cultural resources inventory, evaluation, and assessment program conducted by a qualified NPS and/or state park archeologist would precede all trail construction.* 2. *In accordance with Section 106 of the National Historic Preservation Act, the administering agencies would consult with the SHPO and the ACHP prior to the implementation of any of the proposed actions (e.g., new facilities, facility enhancements, campgrounds, etc.) that might affect cultural resources. The administering agencies would consult with concerned Native American Indian groups to assist in developing measures to ensure that this program is developed in a manner consistent with respect for Native American Indian beliefs, traditions, and other cultural values.* 3. *Compliance with Section 106 of the NHPA and CEQA would be required for all construction activities that alter the historic characteristics of any property.* 4. *To assist with visitor education, the Mugu Lagoon Visitor Education Center would include information on traditional lifeways and the significance of the settlement of Muwu to the cultural history of the area.* 5. *The northern gateway visitor center would employ virtual technology as an education tool.* 6. *The Decker Canyon accessible day use and overnight environmental education camp and the overnight education camp at Corral Canyon would explore the cultural and ethnographic resources as well as the natural resources.*	• The recreation alternative offers a low level of protection for cultural resources, reserving only 25 percent of the lands for low intensity use and 65 percent as moderate intensity, with the remaining 10 percent for high intensity. Component actions are also the most intensive in the moderate use area, likely leading to increased impacts in the zone. Under the recreation alternative, there would be a notable increase in the potential number of cultural resources that would be affected by project impacts and required mitigation. The potential for unintended damage would also increase. Impacts to cultural resources from the recreation alternative would be minor with the implementation of the mitigation measures including: 1. *A monitoring program that would assess the rate and nature of impacts to cultural resources in the vicinity of trails and other high intensity use areas would be established.* 2. *The administering agencies would consult with the SHPO and the ACHP prior to the implementation of any of the proposed component actions. Because multiple uses have the potential to accelerate degradation of cultural resources on all trails, all trails would be subject to cultural resources investigations.* 3. *A cultural resources inventory, including subsurface exploration, would be completed prior to the finalization of plans associated with the Mugu Lagoon Center, to assess the potential to adversely impact archeological deposits in this area. To assist with visitor education, the education center would include information on traditional lifeways and the significance of the settlement of Muwu to the cultural history of the area.* 4. *Compliance with Section 106 of the NHPA and CEQA would be required for all construction activities that alter the historic characteristics of any property.* 5. *Prior to any ground-disturbing activities, the Malibu Bluffs visitor center site would be subject to a cultural resources investigation, including inventory, evaluation, and impact assessment by a qualified NPS and/or state park archeologist. Monitoring by a qualified NPS and/or state park archeologist and a Native American Indian representative would accompany any ground-disturbing construction.*

	MITIGATION MEASURES COMMON TO ALL ALTERNATIVES	NO ACTION ALTERNATIVE	PREFERRED ALTERNATIVE	PRESERVATION ALTERNATIVE	EDUCATION ALTERNATIVE	RECREATION ALTERNATIVE
Cultural Resources (cont'd)						
Archeological Resources, Historic Structures, Cultural Landscapes and Ethnography *(cont'd)*		7. *Native American Indian groups would be consulted to determine appropriate mitigation measures regarding potential impacts to cultural landscapes and places of traditional or sacred significance and would assist in designing appropriate mitigation measures.* 8. *To the extent feasible, trails would be constructed to avoid or minimize impacts to the traditional values of such places.* 9. *Trails created by mammal tracking activities that intersect constructed trails would have posted signs educating or restricting use by visitors.* 10. *Protecting watershed and coastal resources through construction or revegetation activities might impact historic properties or archeological sites if ground is disturbed. The impacts would range from minor to major. With preceding cultural resource inventory, evaluation, impact assessment, and, if necessary, mitigation (data recovery, avoidance), impacts would be negligible.*	8. *All road improvements would be preceded by a cultural resources investigation conducted by a qualified NPS and/or state park archeologist, and a historic landscape architect, inclusive of inventory, evaluation, and impact assessment.* 9. *Protecting watershed and coastal resources through construction or revegetation activities might impact historic properties or archeological sites if ground is disturbed. The impacts would range from minor to major. With preceding cultural resource inventory, evaluation, impact assessment, and, if necessary, mitigation (data recovery, avoidance), impacts would be negligible.*	6. *Compliance with Section 106 of the NHPA and CEQA would be required for all construction activities that alter the characteristics of the historic property.* 7. *A cultural resources inventory, including subsurface exploration, would be completed by a qualified NPS and/or state park archeologist prior to the finalization of plans associated with the administration and education center at the Gillette Ranch facility, Paramount Ranch, and the Malibu Bluffs visitor center to assess the potential to adversely impact archeological deposits in this area.* 8. *The documentation that would accompany the designation of the entire Mulholland Drive as a scenic corridor would provide information that could be integrated into the management of this resource.* 9. *Protecting watershed and coastal resources through construction or revegetation activities might impact historic properties or archeological sites if ground is disturbed. The impacts would range from minor to major. With preceding cultural resource inventory, evaluation, impact assessment, and, if necessary, mitigation (data recovery, avoidance), impacts would be negligible.*	7. *Protecting watershed and coastal resources through construction or revegetation activities might impact historic properties or archeological sites if ground is disturbed. The impacts would range from minor to major. With preceding cultural resource inventory, evaluation, impact assessment, and, if necessary, mitigation (data recovery, avoidance), impacts would be negligible.*	6. *All road improvements would be preceded by a cultural resources investigation by a qualified NPS and/or state park archeologist, inclusive of inventory, evaluation, and impact assessment, followed by mitigation, if necessary.* 7. *Protecting watershed and coastal resources through construction or revegetation activities might impact historic properties or archeological sites if ground is disturbed. The impacts would range from minor to major. With preceding cultural resource inventory, evaluation, impact assessment, and, if necessary, mitigation (data recovery, avoidance), impacts would be negligible.*
Visitor Experience	• Though impacts resulting from increased visitor use would be reduced by the following mitigation measures, these mitigation measures are not likely to change the intensity and severity of the impacts. 1. *Guide visitors to high use areas.* 2. *Encourage visitor use during less busy times.* 3. *Limit opportunities for parking outside of designated parking areas and provide adequate parking at, or alternative transportation to, high intensity use areas.*	• Under the no action alternative, increased visitor use associated with new facilities may have a moderate adverse long-term impact on visitors preferring solitude and a moderate beneficial impact on those visitors who prefer a more social experience. The quality and range of visitor experience may gradually decrease over time as cumulative impacts from increased development, population and tourism reduce opportunities for solitude and quiet. Although impacts resulting from increased visitor use would be reduced through implementation of mitigation measures, these mitigation measures would likely not change the intensity and severity of the impacts.	• The preferred alternative would maintain the existing range of recreational visitor experiences. Increasing the percentage of low intensity use areas would help ensure that visitors have the opportunity to experience quiet and solitude, as would boundary adjustments to include more undeveloped space. A boat tour along the coast would give visitors the opportunity to view the recreation area from another perspective and learn about marine life. New opportunities would be available through visitor education facilities that would have a moderate beneficial effect on the quality of the visitor's experience. The beneficial visitor experience effects would be enhanced further by following the mitigation measures 1. *Improve existing trails, and create new trails and adequate camping areas in moderate intensity use areas.*	• The existing range of recreational visitor experiences would be maintained. Increasing the percentage of low intensity use areas and adjusting boundaries to include more undeveloped space, would help ensure that visitors have the opportunity to experience quiet and solitude. This might result in a major beneficial effect for those that seek that kind of experience. Mitigation measures for reducing impacts related to increased visitor use and restricting activities in areas previously dedicated to moderate intensity uses would reduce the adverse impacts to minor.	• There would be more destinations for learning about park resources for the visitor in the education alternative. Also, this alternative would offer camping for groups in the park at designated educational facilities. For school groups and some visitors, all the new educational opportunities would positively affect their experience. Approximately 80 percent of the park would be managed as a low intensity area. Mitigation measures for reducing impacts related to increased visitor use and restricting activities in areas previously dedicated to moderate intensity uses would reduce adverse impacts to minor.	• The existing range of recreational visitor experiences would be maintained. However, visitor services would be increased and improved. A range of educational opportunities would be available. These would be moderate beneficial effects on visitor experience. • Opportunities for solitude would be available only in the designated preserve areas, and that would diminish as the population grows and visitors seeking that experience increase, as this alternative does not provide for boundary adjustments. Impacts related to increased visitation could be minimized but would remain moderate to major impacts after mitigation.

	MITIGATION MEASURES COMMON TO ALL ALTERNATIVES	NO ACTION ALTERNATIVE	PREFERRED ALTERNATIVE	PRESERVATION ALTERNATIVE	EDUCATION ALTERNATIVE	RECREATION ALTERNATIVE
Socioeconomics						
Land Use	• The following mitigation measures would decrease impacts associated with the all alternatives. *1. The NPS should work closely with jurisdictions during subsequent general plan and land use development policy amendments to minimize land use designation inconsistencies with prescribed management zones within the SMMNRA.* *2. In areas where high use intensity management zones are adjacent to areas designated by local jurisdictions as open space, access should be designed to direct visitor use away from those open space areas designated by local jurisdictions for resource protection.*	• The no action alternative would maintain the present land use and management approach. In addition, no new boundary studies would be recommended or undertaken as a result of this alternative. Various impacts ranging from negligible to major, depending on location, would occur as a result of inconsistencies between adjacent land uses, as described. These impacts would occur because of inconsistencies in locally designated land uses and NPS prescribed management areas.	• This alternative would emphasize the preservation of existing natural environments. Various moderate and major impacts with the preferred alternative would occur due to inconsistencies between NPS prescribed low intensity management zones and local land use plans. These inconsistencies would be considered a major land use impact, and are greater in extent than those expected under the no action alternative. Additionally, inconsistencies between moderate and high intensity management zones would result in moderate to major land use impacts throughout the study area. Minor impacts would occur in scattered areas throughout the SMMNRA due to the potential location of facilities within land currently designated as open space. • In general, this alternative would have greater land use impacts associated with residential areas encompassed by low intensity management zones, but these impacts would be somewhat balanced by the corresponding decrease in impacts associated with moderate intensity management zones located in residential areas. Decreases in high intensity management areas would lead to a potential reduction in impacts associated with residential and open space lands, although these impacts would still be considered moderate to major, or negligible to minor, respectively. • The mitigation measures would limit the expected impacts associated with the preferred alternative.	• The preservation alternative would increase areas managed for low intensity uses to 80 percent of the total SMMNRA area, while reducing those areas managed for high intensity uses to only 5 percent of the total area, compared to the no action alternative. Many of the same impacts associated with the preferred alterative would also be expected under the preservation alternative, since the NPS designated management zones are identical under both alternatives. Therefore, moderate to major impacts associated with inconsistencies between designated residential and open space and adjacent low and moderate use intensity management zones would occur. The impact discussion under the preferred alternative provides a detailed description of each of the land use impacts associated with the preservation alternative. • Due to the decrease in the number of proposed facilities included in the preservation alternative compared to the preferred alternative, reduced land use impacts could be expected to occur within the specific facility locations, depending on the actual sites selected for facility construction. Negligible to minor or moderate to major impacts would still occur due to inconsistencies between designated open space and residential areas and adjacent high intensity management zones in which facilities would be located, respectively. • Potential moderate to major impacts associated with boundary studies under the preservation alternative would be greater under the preservation alternative as compared to the no action alternative. This increase is due, in part, to the larger potential expansion of protected land to the north of Las Virgenes and Cheeseboro Canyons and into the Conejo Valley, located in Ventura County. • The mitigation measures discussed would limit the expected impacts associated with the preservation alternative.	• The education alternative is similar to the preferred and preservation alternatives, with slight shifts of low use intensity management zones to moderate use intensity zones. Many of the same impacts associated with the preferred and preservation alternatives would also be expected under the education alternative, since the NPS designated management zones are only slightly different under each alternative. The extent of the impacts would vary slightly, with greater areas of inconsistency between moderate use management zones and adjacent residential designations and correspondingly less areas with inconsistencies between low use intensity management zones and locally designated residential land. Moderate to major impacts associated with inconsistencies between designated residential and open space and adjacent low, moderate, and high use intensity management zones would occur. • Potential impacts associated with boundary studies under the education alternative would be similar to those identified with the preferred alternative. Potential inconsistencies in locally designated land uses compared to NPS prescribed management zones would be potentially major relative to the no action alternative. • In general, while the general land use impacts would remain similar to those described under the preferred and preservation alternatives, slight shifts in moderate to major impacts would be expected under the education alternative due to the difference in area dedicated to low use intensity management. • Mitigation measures would limit the expected impacts associated with the education alternative.	• The recreation alternative would promote expansion of recreational opportunities through new recreation area development on lands previously disturbed and of low environmental sensitivity and habitat value. Improvements proposed in moderate and high intensity areas would change the undeveloped character of portions of the SMMNRA. • The mitigation measures would limit land use impacts associated with the recreation alternative.
Population, Housing, and Employment	• Not applicable	• This alternative would not result in a change in population or housing within the SMMNRA or surrounding region. The number of jobs created to staff new facilities would be extremely small within the SMMNRA and surrounding region relative to regional employment. No mitigation measures are required.	• The preferred alternative would not result in a change in population or housing within the SMMNRA or surrounding region. In addition, additional facility development would contribute minimal employment opportunity on a regional basis. No mitigation measures are required.	• This alternative would not result in a change in population or housing within the SMMNRA or surrounding region. The number of jobs created to staff new facilities would be minimal within the SMMNRA or surrounding region. No mitigation measures are required.	• This alternative would not result in a change in population or housing within the SMMNRA or surrounding region. The number of jobs created to staff new facilities would be minimal within the SMMNRA or surrounding region. No mitigation measures are required.	• The recreation alternative would not result in a change in population or housing within the SMMNRA or surrounding region. The number of jobs created to staff new facilities would be minimal within the SMMNRA or surrounding region. No mitigation measures are required.

SUMMARY OF ENVIRONMENTAL CONSEQUENCES AND MITIGATION MEASURES

	MITIGATION MEASURES COMMON TO ALL ALTERNATIVES	NO ACTION ALTERNATIVE	PREFERRED ALTERNATIVE	PRESERVATION ALTERNATIVE	EDUCATION ALTERNATIVE	RECREATION ALTERNATIVE
Socioeconomics (cont'd)						
Transportation	• Not applicable	• Traffic volumes on the roads within and near the SMMNRA will continue to increase due to growth in the surrounding communities. Traffic congestion will increase accordingly at critical intersections and on the high volume corridors. Topanga Canyon Road, Malibu Canyon Road, Kanan Dume Road, and the PCH from Malibu east will experience the greatest amounts of traffic congestion and other related problems. All other roads within the SMMNRA will experience increased volumes over time, but will continue to operate effectively and without unacceptable levels of traffic congestion. • It is not within the ability of the NPS to control or restrict growth in the surrounding communities. Mitigation would include the promotion and development of transit operations and ridesharing programs, which would help reduce the number of vehicles using the commuter corridors through the SMMNRA.	• Transportation impacts and changes in traffic volume attributable to the preferred alternative are insignificant in the regional context. The shuttle system and other actions in the preferred alternative that relate to facilitating public transit would help reduce growth in traffic volume and congestion along high-volume corridors resulting in a beneficial impact. These actions would also reduce the overall demand for expanded or new parking facilities at park sites within the SMMNRA.	• Transportation impacts and changes in traffic volume attributable to the preservation alternative are insignificant in the regional context. The shuttle system and other actions in the preservation alternative that relate to facilitating public transit would help reduce growth in traffic volume and congestion along high-volume corridors resulting in a beneficial impact. These actions would also reduce the overall demand for expanded or new parking facilities at park sites within the SMMNRA.	• The modifications proposed in the various action alternatives will only generate very small traffic volume increases. These slight increases will not create measurable amounts of traffic congestion or other related traffic impacts. • Transportation impacts and changes in traffic volume attributable to the education alternative are insignificant in the regional context. The shuttle system and other actions in the education alternative that relate to facilitating public transit would help reduce growth in traffic volume and congestion along high-volume corridors resulting in a beneficial impact. These actions would also reduce the overall demand for expanded or new parking facilities at park sites within the SMMNRA.	• The modifications proposed in the various action alternatives will only generate very small traffic volume increases. These slight increases will not create measurable amounts of traffic congestion or other related traffic impacts. • Transportation impacts and changes in traffic volume attributable to the recreation alternative are insignificant in the regional context. Actions in the recreation alternative that would promote transit use would have a beneficial impact by reducing growth in traffic volume and congestion along high-volume corridors. These actions would also reduce the overall demand for expanded or new parking facilities at park sites within the SMMNRA.
Public Services and Utilities	• The following mitigation measures would decrease impacts: 1. *Fire awareness should be increased for park visitors through the use of signage and public information programs.* 2. *The on-site storage of combustible and flammable materials should be limited.* 3. *The NPS should coordinate with the Los Angeles and Ventura County Sheriff's Department to ensure adequate police protection services for the proposed management areas and facilities.* 4. *New facilities should provide additional on-site water supply/storage as necessary to reduce pressure on water suppliers and to increase the reliability of facility water supply.* 5. *Wastewater disposal systems should be planned and designed for each proposed facility at the time it is proposed to ensure adequate wastewater capacity.* 6. *The location of the nearest solid waste facility with sufficient capacity to accommodate the required additional waste flow should be identified by the administering agencies during facility planning stages. The availability of solid waste capacity should be confirmed for each facility before construction.* 7. *Energy consumption on parklands should be minimized.* 8. *The availability of energy supply from local providers should be confirmed by the administering agencies prior to facility implementation. If service is questionable, on-site power should be considered using alternative sources of energy, including solar power or individual generators.*	• The no action alternative would have moderate impacts on public services and utilities due to existing available capacity at local suppliers.	• The preferred alternative would result in potentially moderate impacts to fire and police protection services. Negligible impacts to water, wastewater, solid waste, and energy would also occur. The mitigation measures would limit the level of impacts associated with the preferred alternative.	• Impacts under the preservation alternative would be negligible to fire and police protection services, as well as water supply, waste management, and energy. The mitigation measures would limit the level of impacts associated with the preservation alternative.	• Impacts under the education alternative would be similar to those discussed for the preferred alternative. Moderate impacts to fire and police protection services could be mitigated to minor levels. Negligible impacts to water, wastewater, waste management and energy would also occur. The mitigation measures would limit the level of impacts associated with the education alternative.	• Impacts under the recreation alternative would be similar to those discussed for the preferred alternative. Moderate impacts to fire and police protection services could be mitigated to minor levels. Negligible impacts to water, wastewater, waste management and energy would also occur. Energy consumption on parklands would be minimized.